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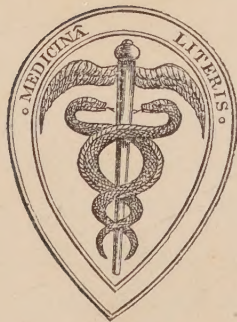
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JOURNAL OF
CUTANEOUS MEDICINE
AND
DISEASES OF THE SKIN.

A QUARTERLY RECORD OF
DERMATOLOGICAL SCIENCE.

EDITED BY
ERASMUS WILSON, F.R.S.

VOL. I.



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JOURNAL OF CUTANEOUS MEDICINE, AND DISEASES OF THE SKIN.

INTRODUCTION.

TO be a true disciple of MEDICINE is to be endowed with an ardent desire to comprehend and to master the various parts and mysteries of which medical science is constituted. The special direction which the inquirer may take, the manner in which he may pursue his investigations, and the selection of subject which he may adopt, will depend upon individual taste, and sometimes on circumstances, or even upon chance. Just as the naturalist, in a more extended field, has his special objects of interest and study, so the medical investigator becomes aware of a mental inclination towards a particular division of the noble and interesting science which it is his duty and his pleasure to cultivate. To one, the nervous system may offer charms superior to every other; to another, the vital fluid that circulates perpetually through the animal frame; to a third, the locomotive system, or the economy of the different organs. His education, as well as necessity, secures that the organism shall be studied in the first place as a whole; and, having completed that study, he finds to his amazement, that, whichever way he may turn, new subjects of interest rise up on every side; and he, moreover, becomes aware, that without the devotion of a special attention to each, something—and, may be, something of importance—must remain to him unknown. And such would continue to be the position of the disciple of medicine, always seeking, and always finding more

to seek, and almost hopeless of ultimate success, were it not for the fact that he stands not alone; that, while he pursues and gains a truth in one direction, his fellow-worker is searching with ardour in a second and a third; and when each separate investigator has mastered his subject, or, more properly, a portion of his subject, he returns like the laden bee to the hive, and stores his gains for the benefit of all. It is thus that the varied tastes of man which lead him away from his fellow-man in the first instance, become a means of bringing him back at a no-distant period, and of uniting in the end his diverging aims for one common good.

If we look around upon the community of medicine, we are struck with lively emotion at the eminence which the various departments of medical science have attained, through the zealous pursuit of knowledge by individual members of our profession; and we are forcibly led to the conclusion that every man of eminence has his subject of special devotion and interest—has, in fact, his excitor or instigator, which, by its reflex action, contributes to the movement and perfection of the whole. It is scarcely possible to mention a name, in the present or in the past, with which the mind does not almost unconsciously associate a peculiar excellence in relation with some organ or disease; and we are constrained to acknowledge that separate excellences drawn together and combined have, in no small degree, contributed to the present state of perfection of our science. While, therefore, we extend our meed of praise to the particular and special excellence, we acknowledge its merits only in its influence upon our general science; we are led to comprehend, also, how the perfection of the general may owe its accomplishment to the perfection of the special; how, in fact, the perfection of the whole may be consequent on the perfection, and perfect combination, of its parts.

Among objects of special study, both nature and art have tended to distinguish from the rest CUTANEOUS MEDICINE. The earliest physicians and the Fathers of physic instinctively devoted themselves to its attention, both on account of its regional position and the pathological display which it

brought immediately under their notice. In the thirteenth chapter of Leviticus, the morbid appearances of the skin are taken as the test of safety or danger to the community, and the means of diagnosis of its various diseases; while art has no less contributed to our interest in the subject by the aids which have been derived from anatomical investigation and the application of the microscope to the purpose. We are willing to confess that the researches of Breschet and Vauzeme into the complicated structure of the dermal tissues, and the apparent obscurity and the seeming multitude of its affections, gave the first stimulus to our desire to pursue the study of its diseases, and attain a knowledge of its pathological and morbid phenomena.

We were not long in discovering, what indeed is patent to every observer of nature, that while our previous study of the general organism helped us to a knowledge of the part, our knowledge of the part became in its turn the key to our better acquaintance with the whole: we perceived that the skin was a sentient, a circulating, a moving, a breathing, a secreting, and a sympathetic organ; and that the observation of the phenomena of these functions instructed us at the same time in the phenomena of the nervous system, the circulating system, the muscular system, the respiratory, digestive, and secreting systems; and we came to the conclusion that to know the skin thoroughly is to know the entire organism, and to know the skin besides.

The capabilities and resources of any one department of science and art can only be comprehended by those who have given time and consideration and study to its constitution; and the careful attention which we have for many years devoted to the skin and its diseases, has convinced us that much may be accomplished towards the perfection of the science and the management of those diseases, by the united labours of the many in the one direction. It has seemed to us that this purpose would be much favoured by the publication of a JOURNAL, which should record the observations of fellow-workers in the same field; and, in furtherance of this purpose, we now invite the literary aid and assistance of all those who

have already made, or are willing to make, the study of Cutaneous Medicine an object of interest. We propose to issue a QUARTERLY JOURNAL devoted to CUTANEOUS MEDICINE and DISEASES OF THE SKIN, and the objects which we intend to embrace are :—

Lectures on Cutaneous Subjects.

Papers, Essays, and Original Investigations.

Reports of Cases.

Hospital Reports.

Reviews and Notices of Books.

Editorial Comments.

Cutaneous Hygiene.

Therapeutical Memoranda.

Illustrations of the Progress of Cutaneous Medicine, both
at Home and Abroad.

Correspondence.

We are desirous that every step made towards the progress and perfection of cutaneous medicine should find its record in our pages, and that the volumes of our Journal should become the archives of every matter of interest appertaining to the cutaneous system; and we trust that, by pursuing this object conscientiously and honestly, by representing the combined information of a number of co-labourers and observers, we may accomplish much towards simplifying the complexity of cutaneous diseases, and subject many, at present regarded as inveterate and indomitable, to a certain and successful principle of treatment.

LECTURES ON CUTANEOUS MEDICINE AND DISEASES OF THE SKIN,

BY ERASMUS WILSON, F.R.S.



LECTURE I.

On the Anatomy, Physiology, and Pathology of the Skin.

GENTLEMEN :

THE SKIN is the external surface membrane or integument of the body, as is the mucous membrane the internal integument. It is composed of two layers ; an internal layer, the *derma* ; and an external layer, the *epidermis*.

The DERMA, or CORIUM, may be regarded as an adaptation or modification of the surface tissues of the body to suit a particular purpose ; by its internal face it is continuous with the superficial subcutaneous or areolar tissue, while its external face has received the name of *limitary*, or *basement membrane*, limitary, because it is the boundary of the vascular tissues ; and basement, because it constitutes the base on which the epidermis rests. The term “membrane,” applied to the limitary and basement face of the derma, must be accepted with some reserve, as the presence of a separate layer has not been demonstrated ; and the most simple idea that can be given of it is, to regard it as the limit of the special organization of the derma.

If we subject the derma to examination, from its internal surface to its exterior, we find it at first presenting the structure of a coarse network, the *pars reticularis*, and the network, becoming gradually finer and finer as we follow it outwards ; nearer the external surface it resembles the tissue of a fine sponge ; and most externally of all, it is transparent and homogeneous, or indistinctly fibrillated. Moreover, quite at the external surface it is raised into minute prolongations,

which are termed *papillæ*, and which, with the basis from which they arise, constitute collectively the *pars papillaris*.

A further examination of the external face of the derma exhibits not only papillary prominences, but also numerous perforations which are the mouths of tubuli, stretching more or less deeply into the substance of the corium. The apertures of the perforations are the *pores* of the skin, and the tubuli its *follicles*; and the follicles are partly devoted to the formation and maintenance in position of the hairs, and partly to the excretion of the glandular products of the skin. Moreover, the observation of the external face of the derma demonstrates to us the existence of two surfaces, one of which is apparent, namely, the *papillary surface*, and the other occult, namely, the *follicular and glandular surface*.

We may next inquire into the structural composition of the derma, which we shall find to consist of white fibrous or dense connective tissue, muscular tissue, vascular tissue, nervous tissue, fatty tissue, and loose connective tissue. The most abundant of these is the white fibrous tissue, which is the chief constituent of the *pars reticularis*, enters largely into the composition of the stroma of the upper or areolar portion of the corium, as well as the *pars papillaris*, and is the material of construction of the *papillæ*. Mingled with the white fibrous tissue, is a considerable proportion of yellow fibrous or elastic tissue; and less abundantly than the latter, and in some situations more than in others, the unstriped muscular fibre or muscle of organic life. The latter is found in distinct bundles at the base of the areola of the nipple, in the scrotum, and in connection with the hairs, giving rise by its association with the latter to those prominences of the pores of the skin which have suggested the term, *cutis anserina*.

The vessels of the skin enter into and make their exit from the structure of the corium through canals, of which the meshes of the *pars reticularis* are the apertures; in these canals they are associated with the nerves, and the vasculo-nervous fasciculus is surrounded and protected by loose connective tissue, supporting in its meshes minute lobules of adipose tissue. Within the canals of the *pars reticularis*, the arteries and the nerves give off branches, and the subdivisions of these branches, ending in capillaries and fibrillæ, constitute a terminal plexus which is spread out horizontally in the *pars papillaris*, which sends outwards coils and loops and filaments into the *papillæ*, and inwards vascular and nervous plexuses to surround the follicles.

We are thus made aware that the vascular and the nervous

plexuses of the skin are not simply horizontal, but they are also centrifugal or papillary, and centripetal or follicular; the surface of a follicle being identical in point of organization with the surface of the derma. And the latter fact is made more obvious, when we recognize in the mammary gland, the colossal development of a cluster of sebiparous glands, and in the alimentary canal, a compound follicle open at both extremities, and having secondary and ramified follicles opening upon its surface, one of these follicles being the lungs and another the liver. The *horizontal* and the *vertical vascular plexuses* of the skin have an important relation to its states of hyperæmia and congestion; hyperæmia of the horizontal plexus being indicated by a general suffusion, and hyperæmia of the vertical follicular plexus by punctulation.

It is to be mentioned also, that in the organization of the papillæ cutis of the palmar surface of the hands and fingers, and of the plantar surface of the feet and toes, certain of the papillæ are purely nervous, and contain no capillary loop, while the majority are vascular. The nervous papillæ are especially destined for the faculty of touch, and the oval-shaped nervous mass which they envelop has been termed by Wagner, to whom we are indebted for its discovery, *corpusculum tactûs*, and by Kolliker, axile corpuscle. Moreover, the nervous papillæ are met with in greatest number where the faculty of tactile sensation is the most acute, namely, on the pulps of the fingers and the palmar surface of the hand.

Having, then, before us, the general idea of the position and structure of the skin proper, or derma; its relations externally and internally; the modifications presented by its surfaces, a coarse network on one face, and smooth and papillated on the other; perforated in both directions by tubular passages, those from the interior to give transit to vessels and nerves, and those from the exterior to serve for the current of secretions and the support of the hairs; composed intrinsically of connective, elastic, muscular, and adipose tissue; traversed by blood-vessels, lymphatic vessels, and nerves; we may further note that the derma or corium is modified in the different regions of the body, in respect of all the conditions which we have just reviewed, in order to accommodate the especial circumstances or functions of the region or of the part. In one situation it is loosely, in another it is tightly bound down and adherent to the parts on which it rests. The pars reticularis may be remarkable for coarseness in one situation and for fineness in another; the papillæ in certain parts are long and numerous, in others they are scanty and diminutive. The pores and the excretory tubuli are large and abundant in one place, small

and scattered in another ; and the proportions of the different constituents of the skin vary considerably, both in relative and actual quantity. In one situation there exists an abundance of connective tissue ; in another a remarkable quantity of elastic or muscular tissue ; in this the vascular, in that the nervous supply predominates ; and all these variations must be present in the mind in aid of our diagnosis and prognosis of cutaneous disease.

Moreover, in the pursuit and investigation of the pathology of cutaneous disease, to which the present sketch of the anatomy of the dermal textures is no more than ancillary, we shall have occasion to note the *plus* or *minus* of the conditions at present under consideration, as among the most interesting of the features of our studies. We shall meet with instances in which the skin is too tightly and in others too loosely bound down to the structures beneath it, in which the papillæ are monstrous, or atrophied, or absorbed ; in which the pores of the follicles are too large or too small ; and in which the connective, the vascular, and the nervous tissues are at a minimum or in excess.

Next in importance to the derma is the epidermis, the covering by which the derma is invested, that serves the derma as an organ of protection and defence, that yields with its motions, and accommodates itself to the several conditions of health and disease of the more highly organized structure upon which it lies embedded ; that in health is the inseparable bondsman of the *pars papillaris*, while it has a tendency in disease to break from its bondage and desert its relationship and its functions.

The EPIDERMIS is also termed the scarf-skin and the scurf-skin, as though it were the *scarf* thrown over the unprotected derma, or from its known constitution of minute scales, which, by their separation and accumulation on the surface, constitute the *scurf* ; but to us it seems more than probable that the former of these terms takes its origin from the latter, and, as a consequence, that the word *scurf-skin* is the most correct. Another of the synonyms of the epidermis is derived from the Latin *cutis*, namely, *cuticle* ; the terms derma and cutis, and epidermis and cuticula, being mutually synonymous.

The epidermis is the horny and albuminous layer which covers the surface of the derma, and protects it from the injurious agencies of the external world ; the same layer holding similar relations to the mucous membrane is termed epithelium, and just as the derma is continuous at the apertures of the body with the corium of the mucous membrane, so the epidermis is continuous with the epithelium, the epidermis and the epithelium together constituting a perfect sheath or varnish

to the whole surface of the individual, both internally and externally. The epidermis is many times thinner than the derma, but, like the latter, it presents an internal and an external surface. The internal surface is moulded on every irregularity of the derma, forming sockets for its papillæ and sheaths for its follicles; while the external surface is more or less influenced in appearance by the evenness or unevenness of its bed; on one part where the papillæ are few in number and minute, being almost flat, and in another, such as the palm of the hand, where the papillæ are numerous and arranged in parallel ridges, being uneven and ridged.

Another peculiarity of the epidermis is deduced from its deficient elasticity as compared with the derma. The latter, although highly elastic, is necessarily thrown into wrinkles and folds by the movements of the body, and the *lines of motion*, as they are termed, are more or less permanent. The epidermis conforms to this condition of the derma, and exaggerates its results, the hollows and the prominences of the lines of motion as represented by the epidermis being deeper and more strongly marked than those of the derma; and certain of the minuter lines of motion of the skin, which are scarcely perceptible in the derma, are conspicuous in the cuticle. Such, for example, are the lines which radiate from the pores of the follicles, and are produced by the intrinsic movements of the corium, namely, such as result from the action of its special muscular structure; for example, those concerned in the state of erection of the pores termed *cutis anserina*.

The epidermis, besides being the enveloping sheath of the derma, is a cell-tissue of the most primitive structure, endowed with a self-maintaining and self-producing power, undergoing development and growth, possessing a borrowed and an independent vitality, living and performing the destined functions of cell-life; elaborating a soft albuminous material into a horny tissue, and converting albuminous and proliferating cells into thin horny and compactly condensed scales; while in the follicles and glands it assumes the character of the active agent of secretion of the special products of those glands; eliminating *sebum* in one situation, *sweat* in another, and *milk* in a third.

If we subject the epidermis to the same form of examination as that to which we have already submitted the derma, we find it to present on its internal surface a soft cell-tissue, the *pars cellularis* or *rete mucosum*; and on its external surface a dense semi-transparent and firm portion, the *pars cornea*, or horny layer. In bulk the horny layer is several times thicker than the soft or mucous layer; the latter being the immature or

formative portion of the cuticle, consisting of cells with nuclei and granules; the former the perfected structure; the process of elaboration and horny transformation of the cells being completed in the lowest stratum of the membrane. Above this, the horny portion, as a consequence of its manner of formation, is finely laminated, and the detrition of the laminæ on the external surface produces the fine scales which have suggested the terms scurf, and scurf-skin.

It is in the softer under-stratum of the epidermis, the rete mucosum, that the pigment of the skin is deposited; but the pigment, in consequence of the preponderance of albumen, the production of horn, and the exhaustion of fluid, is more or less counterbalanced in the horny layer; hence the horny layer of the cuticle of the negro is whitish or greyish in appearance, and differs but little from that of the European. The rete mucosum is continuous with the cellular epithelium of the follicles and glands; and the cells of the rete mucosum and those of the epithelium may be regarded as identical in structure.

Like the derma, the epidermis is also perforated with tubular passages, which correspond with the pores of the skin, namely, the openings of hair-follicles, the sebiferous follicles, and the sudoriferous ducts. The former of these openings pass through the epidermis in a direct line; but those of the sudoriferous tubuli form a spiral coil, and both carry with them into the mouth of the follicle a conical process, or plug of the rete mucosum. It was the ignorance of this fact that committed certain of the older physiologists to the belief that the cuticle was not permeable; for when they separated a portion of the membrane, and poured mercury on its internal surface, the mercury could by no means be made to find a way through, the little conical plug and its prolongation being an effectual barrier.

Like the derma, the epidermis is modified in different regions of the body to suit the especial functions of the part. It is thin on the eyelids, the scalp, the inner side of the limbs, and the scrotum; while it is thick on the outer side of the limbs, and remarkable for its thickness on the palm of the hands and sole of the feet. Moreover, at the extremities of the fingers and toes it is modified in an especial manner to constitute the nails. Under the influence of a morbid state of the economy, the epidermis may be increased or diminished in quantity and texture: it may be too dry or too moist; too flexible or too rigid; it may separate from its adhesion to the derma and give rise to vesicles and bullæ; or it may break up into laminæ, and present us with the varied phenomena of squamæ and desquamation.

The *follicular* and the *glandular* element of composition of the skin in the next place claims our attention. The follicles and the glands are a simple modification of the derma and the epidermis to suit a particular purpose; that purpose being the elaboration of a peculiar product, in one part and in one region known as the sebaceous matter, or the *sebum*, in another as the sudatory secretion, or the *sweat*. The agents of these secretions are the tubuli which have been already described as perforating the derma from without, which in the one instance are prolonged to the lower stratum of the pars areolaris and end in a small coiled-up mass, the *sudoriparous gland*; and, in the other, ramify in the stroma of the upper region of the derma, and constitute a small ramified and lobulated organ, the *sebiparous gland*. Besides these tubuli there is a third kind, which is straight in its course, which descends in the derma to a varied depth, sometimes extending beyond the lower face of the pars reticularis, and whose chief purpose is the support and maintenance in position of the hair, the *hair-follicle*. Furthermore it may be mentioned that wherever hair-follicles exist, the sebaceous follicle or gland is an offshoot from the upper part of that follicle.

In structure, the hair-follicles, the sebiparous follicles or glands, and the sudoriparous tubuli and glands are identical; all are faced by the derma and lined by a continuation of the epidermis termed epithelium, and all have a laminated condensation of the tissues of the derma around their cylinders, which is termed their *coats*. They also, like the structures heretofore examined, have their peculiarities which adapt them especially to the wants of a particular region. The hair-follicles have an oblique position in the skin, are large in certain situations, and wanting altogether in others, such as the palm of the hand and sole of the feet. United everywhere with sebiparous glands, which form a kind of frill around the neck of the largest follicles, which depend in pairs like clusters of grapes from the neck of those of the scalp, and which are single in connection with the smaller follicles, the hair-follicles of the minuter hairs become secondary to the sebiparous follicles and glands, as on the nose and in the meatus of the ears. In these latter situations the sebaceous follicles and glands are remarkable for their bulk; while in the palmar and plantar surface of the hands and feet they are wanting altogether, and give place to the sudoriferous tubuli and sudoriparous glands. Nevertheless, the differences in the three sets of organs in their most highly developed form are sufficiently characteristic; a simple straight tube, the hair-follicle; a tube convoluted at its extremity, the sudoriparous gland; and a more or less ramified and lobulated

organ, the sebiparous gland. So also and to an equal extent do the functions of the three organs differ; the one a mechanical support, a sheath to the root of the hair; the second, the producer of an aqueous secretion with acid reaction; the third, the source of the fatty element of the skin, bedewing its surface with an oleaginous moisture, giving brightness and brilliancy to the surface and to the hair, and protecting them both from the evils of attrition and the irritation of the atmospheric elements.

The remaining constituent of the skin, namely the hair, brings before us another interesting feature of the animal economy; developed from the fundus of its follicle through the agency of a papilla, the hair presents us with the analogue of a tooth: as the pulp of the tooth is converted into the fibrous dentine of that organ, so the hair-papilla or hair-pulp is transformed into the fibrous structure of the hair; the central aborted cells of the hair-papilla are marked in the centre of the hair-cylinder by the medulla or pith; on the exterior of the fibrous substance of the hair is the transparent representative of the enamel, in this instance the cuticle of the hair, and exteriorly to the latter, the squamous surface represents, according to Huxley, the parallel of the persistent capsule of the tooth. We are struck by the unexpected importance of the hair in the animal kingdom, and our astonishment increases when we find that a hair, a tooth, and an eye are each a simple adaptation of the same primitive organ, altered in its form by special development to suit a special place and fulfil a special office.

The PHYSIOLOGY, or consideration of the uses of the skin, brings to our notice its various qualities of complexion, texture, smoothness, and sensibility. A healthy *complexion* of the skin is one of the most striking of its characters, but not the most easy to describe, and in this, as in many other examples of medical diagnosis, the eye of intelligence and experience comes to our aid. We know the delicate tints of white, of yellow, of blue, and of brown, of the dermal tissues, and we recognize as the healthy complexion, the lighting up of these tissues by the arterial and partly by the venous blood. To the Dermopathologist there is no better test of the health of the body than the appearance of the skin; and to him the complexion of the face affords powerful aid in his scrutiny, by means of the tongue, the pulse, and the inward sensations of the patient; the muddy, the yellow, and the greenish tints of the complexion betoken malassimilation, while an accumulation of the duskier hues points to the solar plexus and its dependent viscera as the source of disorder.

Normal *texture* of the skin is evinced by a healthy firmness, a medium thickness, and a proper elasticity of the integument, and, like the complexion, is to be tested by negative rather than by positive signs. It is neither too soft, nor too thin, neither is it flabby or wrinkled, but it possesses those incomparable qualities which we associate, with much reason, with a healthful condition, which in fact represent the normal standard of health. So also a healthy *smoothness* of the skin is an important indication of its proper nutrition and renovation. An excess of smoothness may result from a morbid change such as interstitial deposition or effusion; while a want of smoothness may be the consequence of unhealthy secretion on the part of the cell-tissue of the epidermis; or of imperfect secretion of the sebaceous and sudatory glandular apparatus.

There is no better test of the normal or abnormal condition of the skin than its state of *sensibility*, and an aberration of sensibility may be regarded as a proof of its deteriorated function. We have examples constantly before us of morbid sensibility; the body is unable to bear the chill of the morning bath, so necessary to the health of the economy; the skin of the face is irritated by the action of soap, so necessary for its cleanliness and comfort. Every day we are constrained to modify our directions or our treatment to suit the abnormal sensibilities of our patients. The morbid sensibility of the skin may assume the positive character of pain, or it may be the seat of itching, tingling, burning, creeping, piercing, and shooting, &c., and the form of pain is sometimes sufficiently characteristic to enable us to determine the nature of the disease; the tickling itching of scabies is pathognomonic; so also is the prickling, tingling, and burning of herpes; so likewise are the creeping and stinging pains of prurigo, the throbbing and burning tingling of urticaria, and the fierce and concentrated itching of papular and indurated eczema; nor are examples of decided neuralgia absent from the cutaneous tissues: it may be a neuralgia of the normal tissues, or it may be a neuralgia of morbid tissues, as in the instance of eczema neurosum.

The nervous sympathies of the skin are manifested in the blush of emotion; the flushes of heat of surface associated with taking food when the stomach is weak and the digestive organs impaired; and the hyperæmic congestions excited by irritability of the abdominal organs, and especially those of the uterine and the reproductive system. That very troublesome disorder, urticaria, is an illustration of the morbid sympathies existing between the digestive organs and the general surface of the body; and that not less annoying but more enduring affection gutta rosacea, between the same organs and

the skin of the face. While the direct influence of the nervous system on the skin is evinced in the development of the vesicles of herpes.

To the physiological operations of the integument belong also the disorders of secreting functions, the derangement of the sebaceous and sudatory secretions; the alteration of pigment-formation, and the morbid changes in the epidermis, the nails and the hair.

The PATHOLOGY of the skin opens up to us an investigation replete with interesting and varied phenomena; and our interest in the subject is increased by having the morbid operations as it were spread out immediately under our eye, and within the reach of our hand. We may distinguish diseases which are especially affections of the *derma*; others which are affections of the *epidermis* and *nails*; and others again which are affections of the *glandular* apparatus. While the disorders of the derma may result from simple *inflammation*, they may involve separately the *nerves*, the *blood-vessels*, and the *blood*; they may be derangements of *development*, *nutrition*, and *growth*; or they may exhibit the pathological condition of *metamorphosis of tissue*.

Inflammation of the derma may present itself as a simple redness or *erythema*; as a rising of the pores of the skin constituting *papulæ*, or larger masses termed *tubercula*; as minute blisters termed *vesiculæ*, or large blisters, named *bullæ*; as vesicles containing pus, or more correctly as *pustules*, and as detached laminæ or scales of epidermis termed *squamæ*; and to these states or *lesions*, as they are technically called, may be added stains or *maculæ*, which may be left behind by the inflammatory process. These pathological lesions may exist separately, or they may all, or nearly all, be present at the same time; and they are sufficiently conspicuous and decided to have been fixed upon by Willan as the signs or types of his eight orders of cutaneous diseases. Erythema, according to Willan, or rather EXANTHEMA, or rash, is represented by "superficial red patches variously figured and diffused irregularly over the body, leaving interstices of a natural colour, and terminating in cuticular exfoliations." PAPULA, or pimple, is "a very small and acuminate elevation of the cuticle, with an inflamed base, very seldom containing a fluid or suppurating, and commonly terminating in scurf." The TUBERCULUM or tubercle is a "small hard superficial tumour, circumscribed and permanent, or suppurating partially." VESICULA, or vesicle, is "a small orbicular elevation of the cuticle, containing lymph, which is sometimes clear and colourless, but often opaque and whitish, or pearl-coloured; it is

succeeded either by scurf or by a laminated scab." BULLA, or bleb, is "a large portion of the cuticle detached from the skin by the interposition of a transparent watery fluid." PUSTULA, or pustule, is "an elevation of the cuticle with an inflamed base, containing pus." SQUAMA, or scale, is "a lamina of morbid cuticle, hard, thickened, whitish, and opaque." While MACULA, or spot, is "a permanent discoloration of some portion of the skin, often with a change of its texture." The definitions of Willan are distinct and lucid, and are still employed in the sense in which they were used by that eminent man, with the exception of the last; the maculæ of the present day applying simply to stains of temporary existence, such as the congestions of small-pox, and the discoloured sequelæ of alphas and syphiloderma; while the maculæ of Willan, namely the ephelida, the nævi and the spili, are distributed in accordance with relationships, as determined by a more advanced school of pathology.

The signs of inflammation of the skin, or *dermatitis*, as of inflammation in general, are redness, pain, heat, and swelling. In simple *redness* we have to distinguish between that which is slight and transient, a mere filling of the capillaries with blood, or hyperæmia; and the more permanent redness, accompanied with other changes in the tissues of the skin, which constitutes dermatitis. The limits between the physiological and the pathological are barely discernible; the blush of emotion is scarcely to be distinguished from the blush of transient erythema or urticaria, and the too frequent repetition and the permanence of the blush becomes a confirmed erythema, as in gutta rosacea. The pathological blush is termed erythema and exanthema, and also erysipelas; but these terms, although signifying nothing more than redness, have special meanings attached to them in their practical application and use.

The redness of the skin offers considerable variety of character; it may be universal or partial; it may also be uniform or punctated; and it may vary in its tint, from the bright scarlet of arterial blood to the purple and the blue, or the livid, of venous blood; or to the lurid and the sombre hue of morbid blood. An uniform suffusion results from the equable congestion of the papillary layer of the derma, the surface capillary plexus; while congestion of the follicular or vertical capillary plexus gives rise to a punctiform redness, which may exist independently, or be a part of the uniform redness. In erythema and erysipelas the redness is uniform; while in one variety of roseola, as also in the exanthematous fevers, namely, rubeola, scarlatina, and variola, it is punctated. The latter dis-

eases may also be taken as the best examples of variety of redness; scarlatina and variola being remarkable for the brightness of their hue, while rubeola is ruby or raspberry coloured, and roseola, rose-coloured or crimson, a tint that verges upon the purple. In a torpid state of the circulation of the skin these tints are depressed to the purple and the livid, and especially in those forms of hyperæmia which, like cyanosis, are associated with a mechanical interruption of the circulation. The alterations of redness dependent on morbid blood, are illustrated by the muddy hues of syphiloderma, those forms of discoloration which have received the name of *copper-coloured*.

Hyperæmia, or distension with blood of the vessels of the skin, must necessarily be associated with some degree of *swelling* of the skin: the swelling may be slight, so as to appear hardly appreciable, or it may be strongly marked, and a distinguishing symptom. The swelling, however, is no test of the degree of force of the hyperæmia, but is dependent sometimes on the region of the body affected, sometimes on constitutional predisposition or temperament, and sometimes on the nature of the disease. An erythema in the palpebral region will generally be attended with more or less tumefaction; one form of erythema is remarkable for its tumescent character, erythema tumescens; there is a general state of swelling of the skin in rubeola, scarlatina, and variola; and a special tumefaction in erysipelas. The swelling of the dermal tissues is sometimes remarkable for its rapidity and suddenness, as in erythema tumescens, and after the bites or stings of some insects; and sometimes it is slow and gradual. In general, it is due to the escape from the vessels of the serous element of the blood; but in certain cases, as in erythema nodosum and tuberculatum, and especially in urticaria, is dependent, in whole or in part, on spasm of the muscular structure of the skin. Where exudation into the affected tissues is the cause of the swelling, as in erysipelas, the skin is apt to assume a peculiar transparent appearance, as though it were tensely injected with a transparent fluid, and to resemble brawn in appearance. The brawn-like transparency and texture of some forms of erysipelas is very remarkable, and similar brawn-like blotches are met with in elephantiasis anæsthetica. Again, it is not uncommon for the accumulated fluids of the tissues to be discharged upon the surface of the derma, and to raise up the epidermis into vesicles and bullæ; in this phenomenon, we find explained the vesicles of miliaria, and especially of eczema and erysipelas; the latter constituting the erysipelas bullosum.

Increased temperature, or *heat* of the skin, is not a conspi-

cuous sign in connection with the pathology of the dermal tissues; in a few instances we have noted a rise in the thermometer of a few degrees in eczema and erysipelas, and also in scarlatina and variola; but, in general, the sensations of heat experienced by the patient are forms or modifications of pain rather than an actual augmentation of temperature. Occasionally when the patient has complained bitterly of heat, the sensation to the hand of a healthy person is one of cold; the feeling of extreme heat in scarlatina and variola is relieved by excluding the atmosphere; and the heat of the zona ignea, or herpes zoster, is a mere modification of sensibility. In like manner the chills and flushes of heat which are associated with certain forms of hyperæmia, must be looked upon as contrastive sensations rather than actual variations of temperature.

Pain in the skin, and accompanying cutaneous eruptions, presents a great variety of character:—the most common manifestation of painful sensation is pruritus, and in addition to pruritus there may be a morbid sense of heat and cold, burning, tingling, pricking, darting, shooting, creeping, sometimes weight and throbbing, and sometimes soreness and aching. The pruritus also has its shades of modification: it may be tickling and not seriously unpleasant, such is the itching of scabies; it may be tingling, as in urticaria; burning and shooting, as in herpes; or pungent and irritating, as in eczema. There is reason to believe that these modifications are in some degree influenced by the extent of nervous tissue involved in the disease: in scabies and erythema the papillary surface only is affected; in urticaria, deeper filaments of the cutaneous nerves; in herpes, as we know, the affection of the nerve extends further along its course and even to its trunk; while eczema is complicated with graver changes in the tissues of the skin. If James I. could advocate the monopoly of scabies to kings and purple blood, on account of the delights of scratching, he would be little inclined to extend his protection to the fierce itching of eczema; which the Romans called scabies, and the Greeks psora, from the tearing and laceration to which it gave rise to assuage the pruritus. The itching of eczema now and then excites a state of frenzied agony, and some of those who have suffered from an allied disorder, namely prurigo, have compared their torments to being broiled on a gridiron; to being eaten up by ants; and to being pierced all over with halberds. Occasionally we find actual pain substituted for itching, as in eczema neurosum, and then the sensation is one of being denuded of skin; or of exposure of the bare nerve; the slightest touch occasions the most intense suffering, and the application of remedies is almost impossible.

ON LUPUS. By J. L. MILTON, Surgeon to St. John's Hospital for Diseases of the Skin.

THE intractable nature of Lupus, and the disfigurement which it occasions, will, I hope, justify me in seeking sedulously to call attention to the subject. A sufferer from this relentless malady is a perfect outcast from society, the loathsome appearance it wears in its more destructive forms being enough to inspire even the least sensitive with horror. The observations I have to offer are almost purely clinical, or a digest of numerous communications lately made to me on the question.

In the spring of last year I published a paper in which were given, more or less fully, the particulars of twenty-five cases of this complaint. The letters I have received in answer leave little doubt that Lupus is generally looked upon as a disease scarcely, if at all, removed from the range of incurable maladies, and that an immense number of remedies are employed for it, of course to the exclusion of a more simple, if not a more valuable, system of treatment. It therefore seemed highly desirable to go more fully into some of the points mooted, especially as an opinion has been expressed to the effect that some of the cases given by me were not true Lupus. Free discussion is the great remedy for the evils of divided opinion on such matters. If no further good be effected, at any rate attention is called to remedies otherwise never heard of; points of diagnosis in themselves of the highest importance are brought to light; and even the obscure nature of the causes of disease may be made more clear. By discussion, it is true, men do not convince each other; but the conflict of opinion never fails to bring forth good for those who choose to avail themselves of the opportunity.

Under the head of Lupus I propose to review not merely the recognized forms, such as the eating, serpiginous, and erythematous, but some other varieties; for instance, the strumous, certain cases of sycosis, and some lupoid kinds of ulceration on the limbs, which, if not instances of true Lupus, are so nearly allied that it is difficult to see in what other category they can be placed.

The term strumous Lupus is applied to that form of the disease which begins with one or more soft, flat, red and moist tubercles, which spread very slowly, but neither suppurate like the cutaneous abscess of scrofula, nor ulcerate at any period. The cuticle is gradually cast off, and to this succeeds an unhealthy

viscid secretion, or loose soft greenish crusts. Generally, as one part encroaches on the sound skin, another heals, or the whole patch may heal from the centre, and spread at the edge. It is, however, in the healing stage that its absolute identity with *Lupus non exedens* stands revealed, the process being attended by absorption, thinning, and bleaching of the skin. It seems to be a very slow evolution of the creeping form of *Lupus* in strumous children, in whom alone I have seen it; and in one boy in whom it had existed for many years before I first saw him, it is much more like *Lupus non exedens*, as we see it in the adult, than it was two years ago.

Again, I think very many cases of sycosis really belong to the same variety. The disease consists of the same group of symptoms—the site alone is different—and as such determines the appearance of different complications: the essence of disordered action is the same. Mr. Erasmus Wilson clearly admits the tubercle to be a frequent symptom of sycosis. In many instances the tubercles which surround, or rather envelop, the hair-follicles, may be identified with those of *Lupus*, both in appearance and growth: they are small and hard, but in every other feature they are one and the same. When pierced and laid open by tearing away the crust, they exhibit, certainly in many instances at least, not the characters of a pustule, but a jagged cavity lined with the grey-coloured, pultaceous, or tough, whitish, adherent secretion of true *Lupus*. When the tubercles waste, this process is followed by the same thinning and change of colour in the skin as in creeping *Lupus*. The duration of the disease, too, is almost indefinite. In one case at present under my care it has lasted quite thirteen years, having in that time destroyed every trace of hair on the sides of the face, leaving the skin superficially spotted wherever the hair had been. The probability is, that a true pustular disease would die out in a tenth part of the time; and even those inclined to look upon sycosis as such, must admit that the continuance for years after of an inflamed, thickened, and tubercular state of the skin, is not a natural accompaniment of suppurative action. The persistence of favus may be urged in opposition to the view that pustular diseases are not so enduring in their nature; but favus is a disease of secretion—it is not a true pustular affection. Nor does the alleged suppuration of the hair-follicles in any way get over the difficulty; in a disease occupying so large a part of the cutis, both in breadth and in depth, it is manifestly in the nature of things that the hair should suffer. This is common enough to morbid action. Besides, real suppuration of any great number of hair-follicles must, I apprehend, be very

rare ; indeed, in many thousand cases of cutaneous disease, I have never seen anything of the kind. Undoubted Lupus will attack the skin on which the whiskers are seated, and, destroying the hair as it goes, spread for an indefinite period of time without exhibiting any pustules. There is at the present time a case of this kind to be seen at St. John's Hospital ; great part of the upper portion of the whiskers has been extirpated by the incessant, though slow, encroachment of the disease ; the surface, where it has healed, is drawn and seared as if it had been branded with a hot iron, and around this is an irregular red margin, dry in some parts, in others secreting a yellowish viscid fluid, or covered with crusts. Lastly, the same remedies which exert the most control over Lupus have, in my hands at least, alone proved beneficial in this form of sycosis.

I am well aware that this view, if it meet with no opposition, will effect little, if any, conviction. I am content to leave the question to time. I ask the reader simply to observe for himself, and leave the case in his hands. When, some years ago, I stated before the Medico-Chirurgical Society my reasons for holding that eczema was not a vesicular disease, not a single person assented to the view, yet now it seems clearly gaining ground. In the same way I am sanguine enough to hope that the present classification of sycosis may come to be changed. I say this after carefully reviewing the evidence on the opposite side of the question, and as carefully re-examining several cases. I do not contest the existence of pustular sycosis ; what I contend for is the frequent appearance of Lupus, or a disease allied to it, in parts covered with hair, a fact distinctly denied by some writers.

All forms of Lupus appear to invade the limbs, but they rarely assume features agreeing exactly with the same disease on the face. Lupus exedens may be seen on the elbow, when it is generally ascribed to a blow, and, for reasons to be brought forward, I hope, in a future number, there may possibly be some ground for this belief. I have also met with it behind and below the knee, on the inside of the thigh, and Dr. Frazer has seen it perforate the knee-joint, causing death from absorption of pus. I have seen two cases in which it appeared to attack the ankle. I say appeared, because though there was every reason to believe in the identity of the two diseases, yet at the first appearance any one might have hesitated to pronounce them Lupus.

The first was on the ankle of an elderly man,* otherwise in

* He was nearly sixty-three years of age.

extremely good health, who was formerly under my care for *Lupus exedens* of the elbow and radial side of the arm, which, taking together the diseased and healed parts, extended from considerably above the elbow to half-way down the arm, and which had lasted then nearly twelve years. I cross-questioned both him and his wife, but could not make out any history of syphilis, though he admitted having had gonorrhœa some thirty years before. I examined his daughter, the only child he had, very carefully, but could find nothing to warrant suspicion.

The disease soon yielded to calomel and iodide of potassium; but a few months ago, a large patch formed on the lower part and outer side of the right leg, just below the calf, which became gradually covered with a remarkably hard and tenacious crust, beneath which was an ulcer exceedingly like *Lupus* in character, and which is now steadily healing under the use of iodide of potassium. The other case was that of a lad who had suffered for several years from *Lupus exedens*, which had, before I saw him, destroyed the tip of the nose and the lips. During the time he was under treatment, he contracted a severe cold, accompanied by bronchitis, followed by a bad cough and great loss of flesh and appetite; a very unhealthy abscess formed over the lower part of the tibia, and near it some papules appeared: in course of time these began to wear every semblance of *Lupus*. How the case ended I am unable to say, as the patient entered another institution, and then went into the country.

I am indebted to the kindness of Dr. Frazer for the particulars of two cases. In one patient, a female of middle age, the disease attacked the right knee; indeed, it was a recurrence of the complaint in the same place where it had appeared several years previously; the ulceration spread deeply, threatening to perforate the joint, but was rapidly and thoroughly checked by chloride of barium, in doses of one-eighth of a grain, aided by poulticing, strapping, and a strong solution of nitrate of copper. In the other, a healthy-looking man in the prime of life, the disease extended from the verge of the anus, along the buttocks, healing and reopening, *but always spreading by distinct tubercles*, which formed in the skin, softened and ulcerated.

Dr. Purdon has had the kindness to inform me that, out of nineteen cases of *Lupus* treated at the Belfast Dispensary for Diseases of the Skin, three had the same disease on the limbs. "In one, a boy, aged thirteen years, strong and healthy in appearance, tubercular *Lupus* occurred on the back of the left hand; in another case, a boy aged nine years, who also had

this disease on his nose, there was a small patch of tubercular Lupus about the size of a penny on the inside of his right thigh ; and lastly, in the case of Ellen Skeftoning, aged twenty-four years, a sempstress, admitted on July 25th, suffering under Lupus erythematosus of nose and both cheeks, which had existed upwards of eight years, the disease likewise occurred on her left hand and little finger."

I shall at once be told that many, if not all, these cases were nothing more or less than tertiary disease ; at least, from the tenour of remarks frequently made to me, I can come to no other conclusion, and as, even apart from the question of diagnosis, the existence or non-existence of a venereal taint is a point of vital importance to the patient as well as to the surgeon, I am anxious to go more fully into this part of the question than is usually done.

The connection of Lupus with syphilis in many cases is so obscure as to require, in forming a diagnosis, all the aid that diligence and experience can lend,—the want of which, indeed, no rules, however complete and lucid they may be, can in any way supply.

In the majority of instances there was no antecedent history of syphilis. I inquired most strictly into the point, and though some of the patients admitted having had gonorrhœa at some previous period, yet I could find no reason to conclude that they had ever suffered from venereal disease ; there were no eruptions to connect this tertiary disease with a sore mistaken for a gonorrhœa, no cicatrices from previous tertiary disease, no falling of the hair, no destruction of the hard or soft palate, and no signs of previous ulceration in the throat. I should not have thought it necessary to say that the scars left by buboes and chancres are worse than useless as evidence, had I not seen symptoms pronounced syphilitic for the reason that those marks existed. It becomes, therefore, absolutely necessary to observe that the chancres which produce the most decided loss of tissue, the phagedænic, are precisely those which are most rarely followed by secondary affections, while the most destructive and obstinate forms of disease may arise from minute, almost microscopic, chancres (the true syphilis of Judd), which heal up in a few days, leaving little, if any, mark, or from the papular form of indurated sore, which may disappear without any traces of its site remaining. In a like manner the indurated bubo, which does not suppurate, is succeeded, in a vast majority of cases, by constitutional infection, whereas, the suppurating bubo, which bursts or is lanced, proves the last of the patient's troubles, in a vast majority of instances at least. Some writers would have us believe that

such results are the inevitable sequence in both cases, but it is not so.

Again, in many of these cases of *Lupus* on the limbs the disease was very much slower in its progress than syphilis usually is ; it was far less amenable to control, and it was not marked by the concomitant symptoms which, sooner or later, start into life when the patient is suffering under true tertiary disease. It is well known that syphilis will sometimes hang about a person for years ; but usually this is because no proper treatment is resorted to. When a thoroughly destructive action is set up it is mostly rapid in its course, or else some unmistakable sign, such as pain, tenderness, and swelling over a bone, or a gummous tumour, appears ; but in the diseases I speak of as *Lupus* there was nothing of the kind ; the disease progressed slowly, but steadily, for years ; the symptoms were as similar to those of *Lupus* on the face as disease on two different sites can be ; there was the same high health and absence of pain as we see in *Lupus* ; the same bleaching in the centre and spreading from the edge in an irregular ring ; the same pultaceous secretions on the sores when they pierced the skin.

At the risk of appearing tedious, I venture to put some of these points in a more concrete form. One of these patients, suffering from *Lupus* of the right elbow, attended occasionally for quite two years, the complaint having then existed for several years ; during all the time he was in attendance, I never could detect any signs of syphilis. Another, a woman, entered as out-patient at St. John's Hospital, with *Lupus* of the lower and inner part of the left thigh. It began as a narrow, irregular opening in the skin, just above the inside of the knee, which gradually spread in all directions, extending slowly in width, burrowing under the skin, and piercing deeply into the cellular tissue. When I first saw her, it had existed three years, but in that time had not reached beyond the size of a five-shilling piece, though near it were some soft large patches of thickened discoloured skin, which had a very suspicious appearance, although the epidermis was entire. Here the patient herself was afraid that she suffered under syphilis, as the surgeon, under whose care she first placed herself—a gentleman whose name is a guarantee that all care had been taken to arrive at the truth—had questioned her on this head, and after a long observation of the case had come to the conclusion that it was not venereal, but more likely to be dependent upon dead bone, which, however, repeated probing failed to reveal. I had to see this woman occasionally for more than three years ; but during that time, though I repeat-

edly inquired, I never could find any signs of syphilis in her or either of her two children. Her husband, who died some time ago, always denied that he had anything of the kind.

Indeed the connection between syphilis and Lupus is still to be made out. Mr. Hunt says Lupus erythematosus is not Lupus, but syphilis, yet it certainly appears in young ladies and women of irreproachable character, against whom there is no other evidence that they had acquired such a revolting complaint. To ascribe it to inherited syphilis would simply mean to offer conjecture as a substitute for fact. Mr. Wilson is quite in favour, however, of the view that it is due to inherited syphilis.

Lupus non exedens will attack the limbs. Mr. Wilson says he has seen it on the arm and leg. In two cases in which I saw it in those parts, the disease on the face was rather a compound of the eating and creeping forms than a good example of either. In one very bad case treated in St. John's Hospital in 1865, the outbreak of the worst symptoms on the face was heralded by several slight but very distinct tubercles on the legs, which only yielded completely when the more serious disease was subdued. In another case, that of Mary Ann P——, mentioned in the paper spoken of,* whose face at the time she began attendance was frightfully disfigured by Lupus non exedens, or rather, as I have said, by a compound of this and the eating form, there were repeated outbreaks of the disease on the arms, thighs, and legs, and I could identify the two diseases most clearly on several occasions. Mr. Wilson has seen the erythematous form of Lupus on the fingers, and Dr. Hillier says it has been seen on the limbs. I had one case, and only one, of strumous Lupus in this situation. The patient was a lad, with all that unnatural fairness of skin, and with the blue eyes and tumid lip which are held to be marks of a strumous diathesis. There was only one diseased patch on the upper and front part of the leg, just to the outer side of the tibia. It was about three inches long, and about two wide at its widest part; it had lasted for several years, and the parts where it had healed showed the characteristic bleaching and wasting of the skin in a very marked manner.

To what category are we to refer those cases of extensive and obstinate, but superficial ulceration, which result from bites, and can they be looked upon as a traumatic form of Lupus? I had under my care a lad whose hand was severely bitten by another boy, between the first and second fingers, the worst wound being between the knuckles. In the course

* On the Treatment of Lupus, by J. L. Milton, p. 18.

of a few weeks an obstinate red scaly ring formed around this spot, and gradually increased in size till it reached the wrist, and extended over great part of the back of the three first fingers, the skin being stiffened, painful, and apparently disposed to a kind of dry ulceration at the edge of the diseased surface. The form of disease could with difficulty be defined, and was not very easy to describe; it was not decided ulceration, and yet it seemed as though the skin must remain marked for life. Neither the patient nor his mother would hear of any painful application being made, and mild measures seemed to have no influence whatever; the disease got steadily worse for several weeks, but my chances of observing it were summarily brought to a close by a surgeon, who had seen the case, proposing to amputate the hand, a difficulty out of which they escaped by disappearing altogether. The other case was from the bite of a parrot on the lip, and somewhat resembled a very bad form of eczema siccum; it had existed several months when I saw it, and had then extended over a very considerable surface. I endeavoured to secure this patient's attendance, for the purpose of having a photograph taken, but he failed to come, and, indeed, all along was very irregular in his visits.

With regard to the prognosis of this complaint, I consider circumstances warrant me in saying that *Lupus* is more amenable to relief, and often more curable, than is generally supposed, time having certainly confirmed rather than weakened the statements put forth in the pamphlet spoken of; some of the patients then lost sight of, or not cured, having been since that time completely set right. I have had the pleasure of showing more than one of these to my colleague, Dr. Tilbury Fox, and other gentlemen. One case was that of a poor woman, Mary-Ann P——, whose face, when she first entered at St. John's, was so covered with crusts and scars that not a piece the size of a shilling had escaped the ravages of the ruthless malady. She got quite well, and has now remained so a long time. In a very bad case of *Lupus exedens*, the cure has remained complete for more than eighteen months: this patient's sister is now in attendance at the hospital. In a case of *Lupus non exedens*, in a middle-aged woman, covering the lips and chin, and which had existed quite two years when I first saw her, the patient has now been perfectly cured for a year; the skin all round the seat of the disease is soft, smooth, and of its natural colour. In a very obstinate and disfiguring attack of erythematous *Lupus* on the left cheek and nose of a young girl, a teacher in a school, where the disease had been for years preceded and then accom-

panied by strumous ulcerations of the skin beneath and behind the jaw, the effect of treatment was both rapid and enduring. When last seen, a few weeks ago, it is scarcely going too far when I say that the disease seemed to all intents and purposes cured, although of course the skin was marked for life. The following brief notes will show how essentially curable some cases, usually held to be very inveterate, may really be. The patient was a girl who had long been under my care for Lupus erythematosus of the face. During my absence she was seen by Dr. Tilbury Fox. On my return I again prescribed for her, and the first result of this change was that she was seized with an attack of acute lichen, under the potent influence of which the Lupus began to succumb with amazing quickness, and the case seems now quite cured, though it is only a very few weeks since the lichen appeared. Another instance was that of a most refractory patient, a young man who never would attend regularly; the disease had once got just well, when, owing to some irregularities, to which he pleaded guilty, it relapsed, and since that I have seen comparatively little of him. About six weeks ago he scalded his foot so badly that he could not leave the house for nearly five weeks, during which time he attended strictly to the instructions given him. It is no exaggeration to say that the case improved more in this time than I had ever seen it do in as many months.

There remain many points connected with Lupus, some of them most interesting, which I cannot venture to touch upon here, simply because it would be unjust to trespass further on the reader's patience and the editor's space. I hope, however, to complete my task in another and an early number of this journal. In the mean time I must ask those gentlemen who have so kindly favoured me with information, to believe that this is the sole reason why I have not made more use of their valued communications.

ON LUPUS VERRUCOSUS. By DR. McCALL ANDERSON,
Lecturer on the Practice of Medicine in Anderson's
University; Physician to the Dispensary for Skin Diseases,
&c., Glasgow.

SYNONYMS: *Scrofuloderma verrucosum*, Author; *Scrofulide cornée ou acnéique*? Hardy.

THERE is a form of eruption with which I have long been familiar, but which does not seem to have arrested the attention of Dermatologists, if one may judge from the fact of

its never having been described, as far as I know, in our language. The cases which have come under my observation, although pretty numerous in all, are by no means sufficiently so to enable me to preclude all possibility of error in the present description; but I doubt not that a more extended experience will confirm the main features of the picture.

It always occurs in strumous subjects, and exhibits generally a warty formation on its surface; hence I have applied to it the name of *Lupus verrucosus*, or *Scrofuloderma verrucosum*. In some cases of *Lupus exedens* (or *Lupus vulgaris* in the stage of ulceration) we observe a warty formation developed from the drying up of the granulations. This is the *Scrofulide verruqueuse* of Hardy,* is only a secondary formation, has no claim to a separate name, and is quite distinct from the disease in question.

Lupus verrucosus commences by the development of small, circumscribed, dusky-red or violet patches, often in the form of tubercles. In saying tubercles, I do not mean spots such as are seen in cases of *Lupus vulgaris*, which have no right to the name, and by speaking of which as a tubercular eruption much error has arisen, but genuine tubercles about the size of a split-pea or bean. Sometimes these are isolated; oftener confluent, so as to form patches, of irregular outline and of variable size, as large even, they may be, as the palm of the hand. I have observed the subsidence of some of these without undergoing a further development, while others have advanced to suppuration; but in the majority of instances they become covered with wart-like excrescences, and then these violet-coloured warty patches present an appearance which, once seen, can never be mistaken or forgotten. The warty formation can be readily picked off without any, or at all events without much pain; but a new excrescence gradually grows in place of that which is removed. The patches beneath the excrescences are not ulcerated, as might be expected, but the papillæ are greatly hypertrophied, project in the form of filaments, which may even exceed a couple of lines in length, and which bleed on the removal of the warty mass.

The latter is marked on its under surface by depressions corresponding to the elongated papillæ just referred to, and is composed entirely of epidermis.

This eruption is, like the other varieties of *Lupus*, very chronic in its course, and when left to itself may last a number of

* "Leçons sur les Maladies de la Peau," 1re partie (1860), p. 142. See also "Leçons sur la Scrofule et les Scrofulides," par le Docteur Hardy, p. 73. Adrien Delahaye, Paris, 1864.

years. As the general health improves, however, either from natural causes or under the influence of treatment, the warty excrescences fall off, and are no longer reproduced; the elevation of the patches diminishes, the colour fades, and at last a white cicatrix is left in the site of the previous affection.

It is met with in the great majority of instances amongst the poor, and particularly amongst the half-starved and neglected children of the very lowest dregs of the population. While it is oftenest observed in children, I am not aware that any age is altogether exempt, and males and females seem equally liable to it. I presume that it may attack any part of the body, but I have noticed it oftenest on the extremities, and especially on, and in the neighbourhood of, the hands and feet; and I have lately seen a case in which a patch existed immediately behind the root of several of the finger-nails, and was accompanied by defective growth of those parts. I have been led to understand that similar appearances to the above have not uncommonly been observed in Paris on the hands of medical students, and that, from a supposed connection between the eruptions and the poison emanating from the dead bodies in the dissecting-room, the term "*Tuberculum anatomicum*" has been applied to it. It is very probable that the disease described by Hardy under the title of "*Scrofulide cornée ou acnéique*," applies to this variety of Lupus; but he states that it is oftenest met with on the face, while I have observed it on almost all parts of the body except the face; so that if it attacks that part at all, it must do so very exceptionally. And again, he speaks of it as a disease of the sebaceous glands, and of the warty excrescences as consisting of hardened sebaceous matter, while, in my cases, they were composed entirely of epidermic cells.

It seems strange that a disease so striking has been so completely disregarded, and for the same reason I think I am perfectly justified in elevating it to the rank of a distinct form of Lupus. I am quite aware that unnecessary multiplication of names and forms of disease, and especially of skin-disease, in which department this has been such a frequent error of commission, is to be avoided. No one can be more keenly alive to the necessity of this than I am; indeed, all my efforts have been in exactly the opposite direction. As proofs of which I may mention my endeavours to show that *Lepra* is but a stage of *Psoriasis*; *Impetigo*, *Lichen*, and *Prurigo*, forms of *Eczema*; true *Pityriasis* the second or scaly stage of *Erythema*; and *Sycosis parasitica*, *Herpes circinatus*, and *Herpes tonsurans*, forms of one and the same disease—*Ringworm*. But this can never be justified unless it be strictly in accordance with truth;

and when disease assumes forms so peculiar as that to which I refer, new names are necessary for their future identification.

The term *Lupus verrucosus* is warranted from the circumstance that the warty appearance of the eruption strikes the eye at the first glance, while its general characters correspond in almost all respects with those of the other varieties of *Lupus*. In illustration of this, the peculiar colour of the eruption, its slow progress, the absence of pain or itching, the formation of cicatrices, although there has been no previous ulceration, and the invariable occurrence of the disease in strumous subjects, may be cited as features common to it and to the other forms of *Lupus*.

The following, then, in my opinion, is the subdivision of the varieties of the strumous diseases of the skin:—

1. *Lupus erythematodes*.
2. *Lupus vulgaris* $\left\{ \begin{array}{l} (a) \text{ non-exedens.} \\ (b) \text{ exedens.} \end{array} \right.$
3. *Lupus verrucosus*.

Lupus verrucosus is a disease of comparatively rare occurrence, for amongst 5,174 cases of skin disease treated consecutively at the Dispensary for Skin Diseases, Glasgow, it occurred nine times only; and its frequency, as compared with the other varieties of *Lupus*, may be gathered from the fact that in the same number of cases they were met with in sixty-seven instances.

The prognosis of *Lupus verrucosus* is, in my experience, invariably favourable, although a cicatricial appearance of the skin is inevitably left; but this is of less consequence than in the other varieties of *Lupus*, seeing that it rarely, if ever, appears on the face. It is generally somewhat slow in disappearing, although it is by no means so obstinate as *Lupus vulgaris*. The treatment comprises the usual anti-strumous remedies, which it is unnecessary to discuss in detail; but cod-liver oil and steel are especially indicated. In some cases an arsenical course may be pursued with advantage, either alone or combined with the above. The following cases are interesting, as showing the effects of cod-liver oil and iron, and as illustrating the symptoms of the complaint.

MARY M., æt. 11 years, was admitted at the Dispensary for Skin Diseases, Glasgow, June 5th, 1865. She was a delicate, strumous girl, very thin, and with a tendency to glandular enlargements. About four years previous, two patches of eruption made their appearance, one on the left heel, which gradually subsided, leaving a slightly cicatricial appearance of the skin; the other

above the left knee, which was in a typical state at her first visit, and corresponded exactly with the previous disease on the heel, to which, therefore, no further reference need be made.

The patch above the knee, when first detected, was a livid tubercle about the size of a bean. It gradually enlarged, and in about a year became covered with a warty-looking mass, which fell off about twelve months thereafter, and a new one gradually grew in its place, which still remained at the time of visit. The patch was then about an inch and a half in length, and one inch in breadth; was considerably elevated, of a vinous colour, and covered with a dark warty-looking mass, which was readily detached without pain. On its removal, the papillæ were seen to be much elongated, and the summits of some of them torn and bleeding slightly. There was no pain in the part unless it was pressed upon; no itching whatever, and there had never been either ulceration or discharge.

Cod-liver oil was ordered, but the patient could not take it; so that on May 20th, syrup of the iodide of iron was substituted (in half-drachm doses thrice daily), while unguentum hydrargyri oxidi rubri was rubbed into the patch twice daily, after the removal of the warty excrescence.

The improvement was very rapid at first, and the warty appearance never returned. By the month of September the disease had entirely disappeared, leaving the skin slightly congested and cicatrized. The steel was recommended to be continued, to prevent a return of the disease; and in November, when she was last seen, she remained quite well.

PATRICK B., æt. 13, was brought to the Dispensary for Skin Diseases, Glasgow, on June 5th, 1865. He appeared to be in tolerable health, though he laboured under a bronchitic cough; but he was in a state of the most abject poverty. He had a patch of eruption upon the left buttock, which, according to his mother's statement, was noticed at birth as a small red spot "even with the skin," and which gradually extended till it attained the size which it exhibited when he first came under observation. It was then irregularly triangular in shape, each side of the triangle being about two and a half inches long. It was evidently composed of a number of tubercles which had become confluent, and was considerably elevated above the level of the skin. The colour of the patch was a very dusky red, and it was covered with a dark warty mass, on picking off which the papillæ were seen to be much elongated, and some of their torn summits bled freely. The warty structure was examined with the microscope, and found to be composed exclusively of epidermic cells. The patient complained of no itching, nor of pain, even when he sat upon the part.

Cod-liver oil and syrup of the iodide of iron were prescribed, the former in doses of from one drachm to half an ounce, according to how it agreed; and the latter in doses of half a drachm, thrice daily. No local measures whatever were employed, in order to test thoroughly the effects of the constitutional treatment.

On the 1st of July the report was that the patch was getting smaller and less elevated; and on the 1st of November it had all but disappeared, leaving a cicatricial appearance of the surface.

There can be no doubt that the cure in this case would have been much more rapid had local treatment been combined with constitutional ; and this leads me in conclusion to make a few remarks on the local treatment of the complaint.

After the removal of the warty mass, which must always be done in the first place, and which can be picked off with perfect ease, stimulating ointments may be used ; such as the Unguentum hydrargyri ammoniati, Unguentum hydrargyri iodidi rubri, Unguentum hydrargyri nitratis, Unguentum iodi compositum of the British Pharmacopœia, or either of the following :—

℞ Unguenti cantharidis ; Ung. hydr. iodidi rubri, aa ʒss. M.

℞ Amyli, ʒij. ; Glycerinæ puræ, ʒj. ; coque et adde Olei Rusci purificati, ʒij. ; Unguenti hydrargyri nitratis, ʒiij. M.

Whichever ointment is used must be rubbed very firmly into the part night and morning, but short of causing pain ; and if one ointment, such as the above mixture of cantharides and red iodide of mercury ointments should prove too stimulating, it must be used in a diluted form, or a milder preparation substituted. Very often rapid improvement takes place for a time under the use of one of these, after which the eruption remains stationary. Change of application under these circumstances should then be tried, and often with the happiest effect.

Sometimes stronger applications are more rapidly effectual, such as the daily painting of the part with tincture of iodine, or with the following mixture at longer intervals :—

℞ Iodi ; Iodidi potassii, aa ʒss. ; Glycerinæ, ʒj. M.

Or the application every second day or so of a mixture of equal parts of crystallized carbolic acid and vinegar ; or the painting of the eruption at intervals of about a week with Smith's "Emplastrum Cantharidinis liquidum."

ON TINEA. By TILBURY FOX, M.D., M.R.C.P., Physician to St. John's Hospital for Diseases of the Skin.

IT is now seven years since I put to print some original observations in regard to parasitic diseases of the surface, embodying certain propositions which appeared to me to be the true interpretation of the phenomena that I had been

carefully studying for some little time; however, until lately, the attempt to excite an interest in the subject has signally failed in its intention, so pertinaciously have men held to the idea, fostered by absence of information relative to minute life in general, that fungi were harmless and accidental elements in the diseases in connection with which they are found. Now, however, a thorough revolution in opinion is gradually taking place, and fungi are day by day becoming more and more accredited with the faculty of effecting changes in living structures and in fluids and solids capable of undergoing chemical change; and the most recent observations all focus as regards their tendencies in such a direction as to strengthen the belief in the vast influence of vegetable organisms as disease- and poison- producers. It is now held that "putrefaction" and "fermentation" are brought about either by their oxidizing influences or by the vital act of the growing cellules of the low forms of vegetable life—a view that has been as severely criticised, considering the time it has been on the *tapis*, as almost any other that can be named and that has as yet firmly stood its ground. Then the poisons of many diseases are not only believed, but in no little degree shown to be dependent upon the direct action of fungi, as in the case of ague and catarrh; the fashion, too, is to ascribe yellow fever and other malaria to a like influence: it is imagined that the floating aërial sporula may also, if not actually produce such diseases as charbon, act as the vehicles of contagion. It must not be forgotten that their presence in all these cases may be chiefly an evidence of the existence of a state of things favourable to the production of poisons, in which, however, they may play a part. Then there can be no question, and the matter appears all the more certain from recent information of French observers, recorded in part in the proceedings of the Bordeaux Congress of last year, that "ergotism," especially in the case of pellagra, could not be brought about except under conditions in which fungi are specially concerned, as the use of food affected by the *penicillium perniciosum*. From the case of diseased maize, as in a host of other instances, we are warranted in asserting that fungi have the power of inducing active changes, not only in living organized structures, but chemical compounds. I think it needful to make these remarks to show that in denying off-hand that fungi produce no ill effects as regards skin diseases, we are running counter to the dicta of facts, and exhibit no little ignorance of the subject in its more general sense. Fungi are essentially ubiquitous, but it is only *when they are present in excessive amount* that they are accompanied by or induce disease: hence the mere finding of spores or

sporules in a case of skin disease does not entitle one to attribute the cause of the latter to the former. The line of demarcation between health and disease is at times difficult to define, but puzzling cases are very rare. The existence of fungi in large amount implies an unhealthy state of the thing upon which they prey. I cannot subscribe to the view that parasites will attack healthy persons. Clinical evidence is against it. The best idea of the nature of the unwholesome state favourable to parasitic growth may be illustrated by that condition which accompanies "mildew" in plants, produced not by damp, but by drought, in which a stagnation of the circulation occurs—the plants attacked becoming devitalized, the subsequent "damp" favouring the development of the fungi, which do not attack plants whose circulation is active and whose juices are freely distributed. A bad state of nutrition is an element in all parasitic diseases. The ubiquity of the fungi exempts few parts of the body. It seems that fungi may be found in the blood during life, in the internal glandular organs, in various cells: this supposes the possibility of the absorption of the germs of the fungus bodily, a doctrine that it appears we must allow, and which would readily account for the occasional presence of fungi in the pelvis of the kidney and other parts; it also at once removes the objection made against parasites as causes of surface diseases, that they have no "boring" properties, and therefore cannot effect an entrance into the skin or the follicle. There are three influences that are necessary to ensure the development of fungi,—heat, moisture, and access of air, and the absence of these will account for the non-development of fungi when "entombed" in the tissues, but for their *rapid* increase, even in shut cavities to which air can obtain access after death, or in fluid that has been removed therefrom, as in the case of sarcinæ in the fluid of the ventricles of the brain. The migration of vegetable is as much possible as that of animal germs.

Unfortunately the question of the identity of vegetable parasitic diseases has been so mystified as to have thrown considerable obstacles in the way of a just estimate of the influence of fungi as producers of mischief. It has been said that if the various epiphytes—the trichophytons and microsporons—are the same in nature, (varieties of the species,) then their importance cannot be great, because the diseased appearances in different instances associated with their presence are so very unlike. This, however, shows a limited acquaintance with the details of botanical science. In the parasitism of plants the most opposite appearances accompany different varieties of the same species of fungus. Again, the super-

added or accidental must be carefully separated from the essential features of the parasitic diseases; for instance, the latitude of variation in scabies is great: the itch may be modified in aspect according to the state of the patient's nutrition; erythema, urticaria, ecthyma, syphilodermata, eczema, and the like, may be present, but the essence of the disease—the presence, burrowing, and development of the acarus—is the same in each case. So with vegetable parasitism, the fungi may be complicated, following or producing many different forms of eruption, and it is our business to inquire into the exact relation which the several phenomena bear to one another. There are two distinct classes of cases, the one where the fungi develop outside, as contrasted with the other, where this takes place within living structures. In the former case, as in the secretion upon the various mucous surfaces, *e. g.* thrush, the growth of the parasite does little damage compared to that which is occasioned where the increase of the fungi is antagonized, as it were, by the resistance of the tissues; the growing force injures and breaks into and asunder the opposing material, whatever it may be. Now this is just what happens in the true forms of epiphytic maladies. I think the present a good opportunity of again challenging contradiction of the truth of my views, which each day I assert receive more and more confirmation. My increased clinical experience teaches me that the earliest trace of fungus is to be found, not at the bottom but the upper part of the follicle, that, gradually travelling downwards, the root of the hair is reached, and whilst there the germs continue to develop rapidly, particularly if there be plenty of secretion present. I believe that the period of incubation,—that is, from the implantation of the fungus germs to recognition of a distinct appearance of disease in the case of the scalp, in the most usual form of Tinea,—varies from four to six or seven weeks. The effect of the fungus is to irritate the follicle, giving rise to the increased formation of epithelial scales, which choke up the follicle, or the outpouring in severe cases of fibrinous material. The fungus never gets into the interior of the hair through the shaft, but always through the soft-growing root; the increase of the number of spores appropriates the fluid present, and therefore renders the hair-shaft dry and brittle, whilst at the same time it tends to split up the hair into its ultimate fibres. The tendency subsequently is towards a fatty change, the commencement of which is seen in the little short “stubs” which are present in severe and chronic cases. Now I assert that in no case where the fungi are absent do you get the changes I have described. Loss of hair may result from failure of nutrition or actual

damage of the hair-forming apparatus, but you never get the peculiar damaged, dry, brittle, split-up hairs, except as produced by a fungus; and, setting aside all other considerations, the absence of all evidence of transitional stages between the normal structures and the “fungi,” the fact that the latter may be traced in the early stage of disease from above downward, and the existence of the mycelial form without spores, as sometimes is the case in *Tinea circinata*, I think show that the foreign structures are not degenerate animal cells; and the ability to germinate and produce the “*aspergillus*” form, which I have again succeeded in doing, at once determines the vegetable nature of the parasites themselves. *The essence of vegetable parasitic disease is the invasion and disease of the hairs and epithelium, which is the pathognomonic lesion.* It is this condition which I have again succeeded in producing out of the body by artificial germination.

The “invasion from without” by fungi is very well brought out by some observations recently made:—

1. M. A. Béchamp has investigated the disease called “*pebrine*,” which is due to a number of dark contractile corpuscles in the tissues of plants of vegetable parasitic nature.

If you take a silkworm, which is covered with black specks, and wash or brush it, a number of these are seen. And M. Béchamp concludes:—

1. The corpuscles are situated on the external surface of the egg. 2. Larvæ which have just left the egg may contain them; but washing removes them. 3. The larvæ spotted with pebrine may have no corpuscles in their tissues, although a washing may discover several of them on the outer surface. 4. In larvæ where there are no spots there may be characteristic corpuscles of pebrine on the surface, but none on the tissues. Hence, says M. Béchamp, these are derived from without, and are vegetable cellules.—(Vide *Comptes Rendus*, Aug. 13, 1866.)

It is gratifying to find that my views have been accepted by the leading microscopist of the day, Dr. Lionel Beale, who, in his new edition of the “*Microscope in Medicine*,” adopts my nomenclature. I therefore again ask that the word *Tinea* may be used in a generic sense to signify the group of parasitic diseases in which the lesion of the hairs and epithelium is *pathognomonic*, though the superadded or accidental features may vary, as follows:—

<i>Tinea favosa</i>	Syn. Favus	Fungus Achorion Schönleinii
<i>Tinea tonsurans</i>	„ Herpes tonsurans	„ Trichophyton tonsurans
<i>Tinea circinata</i>	„ Herpes circinatus	„ „ „
<i>Tinea decalvans</i>	„ Area	„ Microsporon Audouini
		D 2

Tinea sycosis	Syn. Mentagra	Fungus Microsporon	Mentagrophytes
Tinea versicolor	„ Chloasma	„ „	furfur
Tinea tarsi	„ Tinea tarsi	„	Trichophyton tonsurans
Tinea polonica	„ Plica polonica	„ „	sporuloides

It being understood that Tinea is composed of a special state of *soil* (debility), a *fungus*, and the *lesion* produced by that fungus.

This view of Tinea furnishes us with a thoroughly satisfactory method of treatment in general. In the first place, we needs must exclude the air; secondly, destroy or get rid of the fungus; and thirdly, as far as we may be able, alter the character of the soil. The tar and iodine plan put into use by Mr. Coster fulfils the first indication; but the constant application of a layer of grease is the simplest plan. Then the value of epilation is enhanced if employed in the earlier stages, because it removes the greater portion of the spores and sporules, and allows the action of the parasiticides, best dissolved or mixed with ether, which removes any fatty matter that prevents the due action of the remedy, in a solution of mere water. It seems to me that one of the chief peculiarities in the general condition that is suitable to the growth of fungi is a want of assimilation of fat,—how far dependent upon a deficiency of alkali in the system I am unprepared at present to say.

It will also be apparent that the mere inoculation with the fungus is not sufficient for contagion. The suitable soil must exist; hence the discrepancies with reference to the question of contagion.

The intertransference of the “tineæ” of animals and human beings is now becoming an acknowledged fact. Hering, Gurlt, Hertwig, Alibert, Barensprung, Devergie, Frazer, and others, have given us a pretty long array of instances, markedly in reference to the transmission of Tinea circinata from oxen and horses to men and women. In many cases of “mange,” I have found the characteristic damage of the hairs, but not to the same extent, supposedly in consequence of the coarser nature of the hair-shaft. I want to direct attention to this point—that the prevalence of epiphytic diseases is generally co-extensive at the same time in all forms of life; that it seems that the same conditions that are favourable to the occurrence of vegetable parasitism in one, are alike conducive to disease in other beings, so that contagion or transference is not well marked where sporadic cases are concerned, because the special predisposition is not strong; and in the case of the existence of a quasi epidemic, it is favoured not only by the

greater abundance of parasitic elements, or germs, but also a suitable state of soil generally amongst living beings. This fact may explain the discrepancy in the views of different observers, and why the disease *seems* to be contagious at one, and not at another, time.

Lastly, I am anxious to point out, in reference to the question of the identity of fungi, that the inability to produce one form of disease, or fungus, from another, is *per se* no proof whatever of a distinction in kind. De Bary has recently shown that some of the common forms of fungus, the uridineæ, go through a *cycle* of development, which is most difficult to trace, and that many of the varieties require a change of host for their development; and not only this, but one variety will not occur except in its own host. In fact, that, though there are many varieties, it is difficult in the extreme to get an interchange of characters.

My friend Doctor McCall Anderson has challenged my views upon the question of the oneness of epiphytes; and I can only, therefore, reply that the inability, as a rule, to produce one implantation of the fungus of another variety of *Tinea*, is no argument against the *identity of the fungi themselves*.

The matter of vegetable parasitic diseases is capable of great simplification, then, I think. The pathognomonic lesion in all instances is the peculiar alteration of the hair and epithelium, which is, in fact, never produced by any other cause than the growth of a fungus. This is the point put forward for refutation; at the same time in full knowledge that this lesion may be modified, as regards degree of its existence, by the occurrence of secondary phenomena.

ON HERPES AND ZOSTER OR SHINGLES. By
ERASMUS WILSON, F.R.S.

HERPES is a misnomer, but a misnomer with which we must fain be content and use to the best purpose that we are able. From *erpein*, to creep, the Greeks obtained the substantives *erpes* and *erpētes*, signifying, creeping eruptions; for, just as certain eruptions,—for example, *lichen* and *lichenes*,—were remarkable for a settled fixity upon the skin, there were others whose habit it was to move from place to place, to creep onwards, to spread; and these were the *erpētes* or herpetic eruptions. But the idea was merely one of movement, of creeping; *erpes* conveyed no impression of the kind

of creeping, whether fast or slow, superficial or deep, irregular or centrifugal; and each author applied the term as he thought fit, and with a total absence of unanimity excepting in the original notion. Hippocrates, for example, assigns the word *erpates* to the superficial exanthemata and erythemata that are wont to appear and spread out upon the skin at the height of certain fevers, and which were regarded by the ancients as critical eruptions; while Celsus signalizes as *erpates*, centrifugal ulcerations of the skin, whether superficial or deep, and under this denomination includes the progressive and serpiginous forms of lupus and syphiloderma of the present day. Galen follows in the same track, and distinguishes as one example of *erpes*, the *erpes esthiomenos*, or eating Herpes, corresponding with our *lupus exedens*; and the Arabian physicians Rhazes and Avicenna employ the term *erpes corrosiva seu formica* in a similar manner. Plenck treats the word Herpes as synonymous with *serpigo*; his Herpes, or *serpigo exedens*, being the same as the *lupus exedens* of the present day. Alibert, again, with whom Herpes was the representative of the comprehensive and incomprehensible *dartre*, had, among his other groups, *Herpes exedens*; while one of his species was *Herpes furfuraceus circinatus*, the ringworm, or *tinea tonsurans* and *annulata* of our own times. More recently Cazenave has unfortunately preserved the term *Herpes tonsurans*; and Von Barenprung that of *Herpes circinatus* as applicable to *tinea* in its creeping and spreading character.

Very early in the history of Herpes there appeared in association with it the word *ignis*, implying to all appearance, heat and burning, a symptom for which the Herpes of the present day is remarkable. "*Ignis sacer*," writes Celsus, "must also be mentioned among the ill-conditioned ulcers. There are two kinds. One is reddish, or pale red, raised in permanent pustules, of which the principal are of uniform size, but the greater number very small. These pustules contain pus, and are often red and hot; the disease spreads and sometimes heals on the part first affected; sometimes, when ulcerated, the ulcer becomes permanent where the pustules have burst; and a discharge takes place, which seems to be intermediate between sanies and pus. This eruption occurs principally on the breast or sides, on the limbs, and chiefly on the soles of the feet. The other kind is a more superficial ulceration, not deep, but broad, somewhat livid and uneven; healing in the centre and progressing by the circumference; and often, when apparently sound, breaking out again; the skin of the circumference which is about to be attacked, being swollen, hard, and of a dark red colour. This disease chiefly attacks persons

advanced in age, or those of unhealthy constitution ; and principally the legs. *Ignis sacer*, as it is the least serious of the eruptions that creep, is, at the same time, almost one of the most difficult of cure. One day of fever, by drying up the noxious humour, becomes an accidental remedy. And the disease is least dangerous in proportion to the thickness and whiteness of the pus." In the *ignis sacer* of Celsus, we have no difficulty in recognizing *lupus non-exedens*, *lupus exulcerans*, and the ulcerating and serpiginous forms of *syphiloderma*. Gorraeus, in the sixteenth century, remarks, "*est autem zona, ignis sacri species ;*" but Actuarius raises a doubt as to whether *ignis* is to be taken solely in the sense of heat and burning ; for he compares it to flame in its spreading and devouring character as well : "*Herpes dicitur eo quod videatur erpein, quod est serpere per summam cutem, modo hanc ejus partem, modo proximam occupans, quod semper priore sanata, propinqua ejus vitium excipiat ; non secus quam ignis qui proxima quæque depascitur, ubi ea quæ prius accensa erant, deficiente jam materiâ idoneâ, prius quoque extinguuntur.*" It may, therefore, be fairly concluded that the idea of fire and burning leads us no nearer to the *Herpes* of the present day than the creeping habits of its original, although we find the term *zona ignea* occasionally in use amongst modern authors.

One of the most remarkable of the characters of the modern *Herpes* is its occurrence around the middle of the trunk of the body, where it forms a girdle ; but a girdle that is almost constantly deficient in half its circumference. This peculiarity has gained for the eruption the various names of *zona*, a woman's girdle ; *zoster*, a man's girdle or belt ; and our popular expression *shingles*, which is a corruption of the Latin *cingula*. Scribonius Largus, a writer of the first century, observes :—" *Zona quam Græci erpeta dicunt ;*" and it is evident that Scribonius had in his mind, not the creeping *erpetes* of the Greeks which we have just considered, but the *Herpes zoster* or shingles of the present day. Pliny also draws attention to the general fact of the encircling by the eruption of only one half the body, by the remarkable expression : "*Zoster appellatur, et enecat si cinxerit.*" Gorraeus, in 1578, says of it,—" *Est autem zona, ignis sacri species, quæ medium ambit cingitque ; dicitur alio nomine zoster.*" The *Herpes zoster*, however, is not a spreading eruption in the sense of *erpes* ; it breaks out in distinct patches, which ultimately surround more or less completely one side of the trunk of the body, but the patches of which it is composed do not spread from a given centre ; neither do they observe a centrifugal expansion when once they are produced : they obey in their development

another law, namely, that of the distribution of the cutaneous twigs of the intercostal and lumbar nerves, a circumstance which we shall presently have to consider.

By and by a fourth element of notice became imported into the history of Herpes as described by successive authors, namely, that of vesicles and bullæ. Pliny pictures zona as an acute affection accompanied with an eruption of bullæ. Galen, besides the *erpes esthiomenos* previously adverted to, admits an *erpes kegchrias*, or Herpes miliaris, and an *erpes phlyctænodes*; the Arabian physicians Rhazes and Avicenna also allow a Herpes miliaris; while Lorry, in the eighteenth century, gives to this idea a form and a shape that have been transmitted downwards to ourselves in the clear and precise language of our countryman Willan. Lorry's description is remarkable for its accuracy:—"Solitaria vulgo nascitur una herpetis miliaris areola, cute ceteroquin integra limbo rubello distincta. Pustulæ emicant vulgo sero repletæ sub ipsa epidermide aggregatim compositæ. . . . Inest major quam pro malo exoriri debere videretur cruciatus, sed mox et paucarum horarum intervallo subnascitur altera pustularum agglomerationis, quam aliæ mox confertim adnatæ per plurium dierum spatium excipiunt." The successive appearance of the patches is marked in this definition, as also the amount of pain disproportionate in degree to the slightness of the eruption; the vesicles, in accordance with the language of the day, are named *pustules*, but their size is put at too low a standard when expressed by the term *miliaris*. Plenck is more happy in his illustration of the bulk of the vesicles when he says, "Sunt vesiculæ pisi-formes discretæ, atro-rubræ, non raro confluentes, intense prurientes et dolorificæ, quæ instar zonæ seu cinguli ad manûs latitudinem pectus vel aliam partem circumdant;" but is less fortunate in describing the vesicles as "atro-rubræ," which is the exception and not the rule, and which arises from the effusion of blood in their cavity, generally proceeding from local injury, such as scratching or rubbing, and pressure.

We have now arrived at the age of Willan; and Willan, with the evidence before him which we have endeavoured to sketch in the four preceding paragraphs, did not hesitate to discard the *erpetic* and *spreading theory* of the disease, although more consistent with the classical origin of the term, and to adopt the view of the disorder which regarded it as a *vesicular eruption*; and the greater number of succeeding dermatologists have followed his example. "Herpes," he says, "passes through a regular course of increase, maturation, and decline, and terminates in about ten, twelve, or fourteen days. The vesicles arise in distinct but irregular clusters, which

commonly appear in quick succession, and they (the vesicles) are set near together upon an inflamed base, which extends a little way beyond the margin of each cluster. The eruption . . . is accompanied by a sensation of heat and tingling, sometimes by severe deep-seated pain, in the parts affected. The lymph of the vesicles, which is at first clear and colourless, becomes gradually milky and opaque, and ultimately concretes into scabs; but in some cases a copious discharge of it takes place, and tedious ulcerations ensue." We omit that part of Willan's definition which assumes the eruption to be "preceded, when it is extensive, by considerable constitutional disorder," as incorrect; and we may also remark the curious fact mentioned by Bateman in a note to his description of *Herpes zoster*, that in the course of his "attendance at the public dispensary, during twelve years, between thirty and forty cases of shingles have occurred," a number which seems to us to be astonishingly small, in comparison with the frequency of the affection in private practice at the present day.

As Willan is without question the earliest of modern authorities on the natural history of *Herpes*, we shall follow him a little further in his manner of dealing with the subject. The various appearances of *Herpes* he comprehends under six heads, namely:—*phlyctænodes*; *zoster*; *circinatus*; *labialis*; *præputialis*; and *iris*.

1. *HERPES PHLYCTÆNODES* is an eruption of vesicles, of the typical form, occurring on the cheeks, forehead, or extremities, and pursuing the ordinary course; there are seldom more than two or three clusters, and sometimes there is only one.

Bateman unfortunately confounds with the above very clear description, an eruption of *eczema*, which, beginning on the neck and breast, extends to the trunk and lower extremities; and he remarks that "it is chiefly the more minute or miliary variety (*eczema*) which spreads thus extensively; for those (vesicles) which, at their maturity, attain a considerable size and oval form, seldom appear in more than two or three clusters together." In a word, the *Herpes phlyctænodes* of Willan is intended to embrace every possible variety of *Herpes*, excepting the five remaining species.

2. *HERPES ZOSTER* is an eruption of several red patches of irregular form, placed a little distance apart, and sprinkled over with numerous small elevations, which soon become vesicles, in twenty-four hours reach the dimensions of pearls, are transparent in appearance, and filled with a limpid fluid. The patches measure from one inch to two or three inches in diameter, and present a red margin, from the extension of

the inflamed base beyond the congregation of vesicles. Other patches are produced in succession and nearly in a line with the first, for three or four days, "extending always towards the spine at one extremity, and towards the sternum or linea alba of the abdomen at the other, most commonly round the waist, like half a sash."

"While the new clusters are appearing, the vesicles of the first begin to lose their transparency, and on the fourth day acquire a milky or yellowish hue, which is soon followed by a bluish or livid colour of the bases of the vesicles and of the contained fluid. They now become somewhat confluent, and flatten and subside, so that the outlines of many of them are nearly obliterated. About this time they are often broken, and for three or four days discharge a small quantity of a serous fluid, which at length concretes into thin dark scabs, at first lying loosely over the contained matter, but soon becoming harder, and adhering more firmly, until they fall off about the twelfth or fourteenth day. The surface of the skin is left in a red and tender state, and where the ulceration and discharge have been considerable, numerous cicatrices and pits are left."

"As all the clusters go through a similar series of changes, those which appeared latest arrive at their termination several days later than the first; whence the disease is sometimes protracted to twenty or even twenty-four days before the crusts exfoliate." Sometimes the vesicles have terminated "in numerous small ulcers or suppurating foramina, which continued to discharge for many days, and were not all healed before the end of the fourth week."

"In many instances the most distressing part of the complaint is an intense darting pain, not superficial, but deep-seated in the chest, which continues to the latter stages of the disease and is not easily allayed by anodynes: sometimes this pain precedes the eruption."

3. *HERPES CIRCINATUS* is an eruption of small circular patches, having small vesicles with moderately red bases ranged around their circumference; the vesicles are filled with a transparent limpid fluid, break in three or four days, and are followed by thin scabs; the central area is free from vesicles, of a dull red colour, and rough, and desquamates at the end of a week, when the scabs fall off, leaving the new skin of a red colour. A succession of these vesicular rings, occurring on the face, neck, arms, and sometimes the lower extremities, prolongs the attack to the third or fourth week, and is attended with a disagreeable itching and tingling. This form of eruption, namely, *herpetic ringworm*, has been met with

prevailing in families and schools, and has been thought to be contagious, but is widely different from the *contagious pustular ringworm* of the scalp and forehead.

A variety of *Herpes circinatus* is distinguished by larger vesicles, closely set over the whole area of the patch; the pain, heat, and irritation are distressing; there is considerable constitutional disturbance; it may occur upon every part of the body; scabs are formed on the ninth or tenth day, and the attack is prolonged to the fifteenth day.

Willan and Bateman unhappily yield in this case to a popular fallacy, and call the *Herpes circinatus* a vesicular ringworm. But it is evident that the eruption is totally different in all essential respects from the two preceding species, *Herpes phlyctænodes* and *Herpes zoster*.

4. *HERPES LABIALIS*.—"A vesicular eruption upon the edge of the upper and under lip, and at the angle of the mouth, sometimes forming a semicircle, or even completing a circle round the mouth. The lips become red, hard, and tumid, as well as sore, stiff, and painful, with a sensation of great heat and smarting, which continues troublesome for three or four days. . . . The swelling then subsides, and in four or five days more the crusts begin to fall off; the whole duration being about ten or twelve days."

A similar eruption of inflamed vesicles sometimes takes place over the tonsils and uvula, associated with the external eruption, and accompanied with feverish symptoms.

5. *HERPES PRÆPUTIALIS*.—One or two small red patches, accompanied with itching and heat; on the patches are clustered five or six minute transparent vesicles; in twenty-four or thirty hours the vesicles enlarge, become milky, and have lost their transparency, and on the third day they are coherent and assume an almost pustular appearance. On the sixth day the vesicles dry up and form a small scab, which falls on the ninth or tenth day, by which time the skin is healed. Where, however, the inside of the prepuce is attacked and the part is kept moist, the vesicles break on the fourth or fifth day and leave a small ulceration, which begins to heal on the ninth day, the healing process being completed on the twelfth, and the fall of the scab taking place on the thirteenth or fourteenth day.

6. *HERPES IRIS*.—Small circular patches composed of concentric rings of different colours; usually seated on the back of the hands, the palms and fingers, sometimes on the instep. "The patches are at first small, and gradually attain their full size, which is nearly that of a sixpence, in the course of a week or nine days, at the end of which time the central part is promi-

nent and distended, and the vesicular circles are also turgid with lymph; and after remaining nearly stationary a couple of days, they gradually decline, and entirely disappear in about a week or more. The central vesicle is of a yellowish-white colour; the first ring surrounding it is of a dark or brownish red; the second is nearly of the same colour as the centre; the third, which is narrower than the rest, is of a dark red colour; and the fourth, and outer ring, or areola, does not appear until the seventh, eighth, or ninth day, and is of a light red hue, which is gradually lost in the ordinary colour of the skin.

These, then, are the six varieties of Herpes of Willan and Bateman; and, regarding them closely, we find that they present certain differences of character, which bring them under the denomination of an acute affection on the one hand and a chronic affection on the other: to the former division belong Herpes phlyctænodes, zoster, labialis, and præputialis; to the latter, Herpes circinatus and iris. The *acute* group is especially characterized by *limitation of extent and duration*, by *unilateral position*, and by dependence on disturbance or *perversion of nervous function*. The *chronic* group is distinguished by the negative of the preceding characters, namely, absence of limitation either in extent or duration, uniform distribution on both sides of the body, and no special connection with disturbance of function of a particular nerve. These differences are so great as to separate the acute group from the rest as a distinct family, which stands apart from every other known affection of the skin. But not so with regard to the chronic group; both Herpes circinatus and iris approach in their characters so nearly to pemphigus, that while the former is pemphigoid, the latter, in one form of its manifestation, has received the name of *pemphigus iris*.

It appears to us that these essential differences between the two forms of the affection deserve to be signalized by a specific name. And although, for our own part, we should prefer to reject the term *Herpes* altogether, as conveying an incorrect expression of the disease, and assemble the whole of the purely *vesicular diseases* under the name of *phlyctænosis*, a term employed by Hippocrates; yet, as the word *Herpes* seems at present to be inseparably united with the acute group of these affections, we would limit the use of the term to them, and bestow upon the chronic group the less objectionable and highly characteristic term, *phlyctænosis*. Thus we should divide the Herpes of Willan into its two groups; the *acute* group, namely Herpes phlyctænodes, zoster, labialis, and præputialis; and the *chronic* group, namely, *phlyctænosis circinata*, and *phlyctænosis iris*.

As described by Willan and Bateman, the first variety of Herpes, namely, Herpes phlyctænodes, is intended to represent the typical form of the affection wherever it may be situated; it is intended as a *general* denomination of the eruption, while other terms are applicable to *local* forms of development and manifestation; for example, Herpes phlyctænodes zoster, the Herpes of the waist; Herpes phlyctænodes labialis, and Herpes phlyctænodes præputialis: to these, the more common forms, Bateman added another, namely, Herpes proserpens, to distinguish the extension of the eruption in the course of a limb, as along the arm or the leg. Then come the varieties of *figure* exhibited by the eruption, such as the arrangement of the vesicles in a single circle or in concentric circles. The much-abused term *ringworm*, associated with Herpes circinatus, means nothing more than that the individual patches assume the figure of a ring; it has no leaning in the slightest degree to the true ringworm, the tinea tonsurans and tinea annulata.

Since the days of Willan and Bateman, two facts in connection with Herpes have attracted a much merited attention, namely, the neuralgic phenomena associated with the eruption, and the development of the patches in the course or at the points of distribution, of certain well-known nerves. This was first evident in relation to the intercostal nerves, which determine the arrangement of the patches in Herpes zoster: the first patch is commonly seen on the portion of skin supplied by the posterior cutaneous branch of an intercostal nerve; the next patch that appears occupies the portion of skin in which the anterior cutaneous branch of the same nerve ramifies; the third patch is generally met with on the site of the lateral cutaneous branch; and in succession and between these, other patches are subsequently produced. Tracing the relation between the patches and the nerves, we have an obvious explanation of the Herpes proserpens of the arm and of the thigh; and of the generally unilateral position of Herpes labialis and also of Herpes præputialis.

In the mind of an eminent modern pathologist, Von Baren-sprung, these neuropathic phenomena have become the basis of a new classification of the forms of Herpes. He assumes Herpes zoster to be the typical form of the eruption, and having established the term *Zoster* as the substantive expression of the disease, he proceeds to name the varieties of the affection in accordance with their situation, and with the designation of the nerves distributed to the part. Thus, overlooking the original signification of the word *Zoster*, and the awkwardness of supposing the existence of a girdle upon the face, around the neck, or stretched along the limbs, he de-

scribes :—1. Zoster facialis, of which Zoster labialis is a part ; 2. Zoster occipito-collaris ; 3. Zoster cervico-subclavicularis ; 4. Zoster cervico-brachialis, and, when limited to the arm, Zoster brachialis ; 5. Zoster dorso-pectoralis, involving the upper intercostal nerves ; 6. Zoster dorso-abdominalis, including the lower intercostal nerves ; 7. Zoster lumbo-inguinalis ; 8. Zoster lumbo-femoralis, and, when limited to the thigh, Zoster femoralis ; and, 9. Zoster sacro-ischiaticus, having as a dependency Zoster genitalis.

The practical effect of this arrangement is to remind us that the body is divided into head, neck, trunk, and limbs ; that the head has a forehead, an occiput, and a face ; the neck a back and a front ; the trunk a chest, a waist, and a flank ; and the extremities an upper and a lower limb, as well as a genital region. Hebra recognizes this simpler plan in his division of the varieties of Herpes zoster, of which he makes *seven*, as follows :—1. Zoster capillitii ; 2. Z. faciei ; 3. Z. nuchæ, seu, Herpes collaris ; 4. Z. brachialis ; 5. Z. pectoralis ; 6. Z. abdominalis ; and, 7. Z. femoralis.

Herpes is divided by Hebra into four species : 1. Herpes labialis, or, as he prefers to term it, Herpes facialis ; 2. Herpes præputialis, or, more correctly, progenitalis ; 3. Herpes zoster ; and, 4. Herpes iris et circinatus. The latter, namely Herpes iris et circinatus, he is willing to retain as components of the genus, but regards them as distinct from the preceding. And he also looks upon Herpes labialis and præputialis as differing from Herpes zoster in the five following particulars : namely, as being composed of one cluster of vesicles instead of several ; secondly, as of frequent recurrence, whereas Herpes zoster happens only once in a lifetime ; thirdly, that Herpes labialis is associated very commonly with febrile complaints, which is not the case with Herpes zoster ; fourthly, that Herpes zoster is preceded, accompanied, and sometimes followed by neuralgic pains, which does not happen with Herpes labialis and præputialis ; and, fifthly, that the two latter are not generally unilateral, but are apt to affect both sides simultaneously oftener than otherwise.

We must confess that we do not attach any serious weight to the reasons of our well-beloved colleague, which we would venture to answer as follows : firstly, in Herpes labialis and præputialis the extremities of nervous branches are affected instead of main trunks ; secondly, Herpes labialis and præputialis occur repeatedly, from their more frequent exposure to causes of irritation than larger nerves, and especially on account of their relations with the mucous membrane ; thirdly, a febrile state of the system affecting the mouth, is to Herpes

labialis identically the same as an irritant such as cold attacking the trunk of a nerve; fourthly, the lesser degree of pain in *Herpes labialis* and *præputialis* is referrible to the small size of the nervous twig involved, as well as to the irritation being indirect and reflex instead of being direct, as in *Herpes zoster*; and, fifthly, *Herpes labialis* and *præputialis* are most frequently unilateral, and when that is not the case, the irritation of the cutaneous fibrils is a reflex agency from a surface such as the mouth and urethra, occupying both sides of the middle line.

We will now assume that four of the species of *Herpes* of Willan and Bateman, namely, *Herpes phlyctænodes*, *zoster*, *labialis*, and *præputialis*, are comprehended under the generic term *Herpes*, and that the two remaining species, namely, *Herpes circinatus* and *iris*, are put aside as doubtful, or are at once adopted as species of *phlyctænosis*. It in the next place remains to us to follow the eruption in its distribution in the various regions of the body, and note such peculiarities as may be present in the course of that distribution. The *head* brings under our notice the distribution of the three branches of the fifth nerve in front, and certain ascending and occipital branches of the cervical nerves behind: hence we may have, corresponding with the first or ophthalmic division of the fifth nerve, a *Herpes frontalis*, *palpebralis*, and *nasalis*; with the second or superior maxillary division, a *Herpes malaris*, and *labialis*; and with the inferior maxillary, a *Herpes mentalis* et *labialis*; while, posteriorly, we may find a *Herpes auricularis* and *occipitalis*. The most common of all these varieties is *Herpes labialis*, next *Herpes frontalis*, and then *Herpes occipitalis*.

Herpes labialis makes us acquainted with the fact that the eruption is not confined to the skin alone, but that it may attack equally the prolabium, or red part of the lip, and the mucous membrane of the mouth; moreover, that unlike the other forms, it is not constantly unilateral, but is occasionally bilateral. We want facts to prove that it may be developed upon both lips at the same time, but such an occurrence is not altogether impossible.

Herpes affecting the region supplied by the superior maxillary nerve, in other words *Herpes maxillaris superior*, presenting the united forms of *Herpes labialis*, *nasalis*, *malaris*, et *oris*, has lately been brought prominently under our notice in an interesting case published by Mr. Paget, in the *British Medical Journal* for October 13th, 1866. Mr. Paget's patient was a gentleman between twenty-five and thirty years of age. He had been exposed to cold on the 22nd of October,

and in the evening experienced some degree of chilliness, with pain in the right side of his face. On the *third* day that side of his face was swollen, and the cheek, side of the nose, and upper lip were the seat of a copious eruption of the vesicles of Herpes; there were numerous white blisters on the palate and buccal membrane also; and the pain, which was very severe, extended from the lip to the eye, and was accompanied with twitching of the muscles. On the *twelfth* day the eruption began to subside, leaving thick, dark scabs, like those of confluent variola, on the skin, and white deposits resembling a thick diphtheritic membrane on the mucous membrane. On the *eighteenth* day of the eruption, the twentieth from the beginning of the attack, the swelling had abated, the white coverings of the blisters cleared away from the mucous membrane, and the scabs fell off the skin, leaving strongly-marked pitted cicatrices. Then followed some remarkable sequelæ, exhibiting the extreme exhaustion of nerve-force by the disease; on the sixth day one of the bicuspid teeth fell out; on the succeeding day a second, and within a few days later the canine and two incisor teeth; the alveolus at the same time was exposed, and at the end of another week the dead bone was removed; and the case did well. Mr. Paget remarks that the branches of the superior maxillary nerve implicated in this case were the infra-orbital, the anterior dental, and the anterior palatine.

Herpes frontalis takes its origin in perverted function of the ophthalmic division of the fifth nerve, and, knowing its distribution, we may look for the development of the eruption on the forehead alone, on the upper eyelid alone, on the side of the nose, or over the whole region; and we might also anticipate what sometimes really does take place, a morbid affection of the conjunctiva, the cornea, the sclerotica, or the deeper structures of the eyeball. We once saw a vesicle on the outer edge of the cornea, which followed an eruption of Herpes occupying the outer angle of the upper eyelid and eyebrow, for a small extent, and which we attributed to affection of the lacrymal nerve.

Hebra observes: "In some of these cases the eye also is affected; the vessels of the conjunctiva, and those which supply the cornea being injected, and severe pain being complained of by the patient. Under these circumstances, indeed, the mobility of the iris may be so much impaired that the disease may simulate an iritis." This department of the subject has been very much enriched by the exact and careful researches of Mr. Jonathan Hutchinson, who has traced the inflammation of the conjunctiva and eyeball to an affection of

the oculo-nasal nerve; and he finds in the majority of cases as corroborative of his views, the development of vesicles towards the tip of the nose. In eight out of eighteen cases of *Herpes ophthalmicus*, the side of the nose was the seat of eruption, and in six of the eight there existed at the same time inflammation of the eyeball; the parts of the eyeball usually attacked being the cornea, sclerotica, and iris. In one case, where the whole extent of skin supplied by the ophthalmic nerve suffered, the eye became inflamed, with ulcers of the cornea and iritis, and was "practically lost."* We agree with Mr. Hutchinson in his remark that many cases of *Herpes ophthalmicus* are mistaken for erysipelas. To *Herpes ophthalmicus* therefore belong, as subdivisional forms, *Herpes frontalis*, *Herpes palpebralis*, and *Herpes nasalis*. *Herpes maxillaris superior* is illustrated in its completest form by Mr. Paget's case, while a partial manifestation of the same would produce *Herpes labialis superior*; and *Herpes maxillaris inferior* is exhibited in a partial degree by *Herpes lingualis*, resting upon the authority of Hebra, and especially by the not uncommon affection, *Herpes labialis inferior*.

Governed by the cervical nerves, we have seen a *Herpes auricularis* accompanied with a considerable patch of eruption in the mastoid region referrible to the auricularis magnus and occipitalis minor nerves; and a *Herpes occipitalis*, in which the occipitalis major seemed principally involved, and attended with much suffering, in the person of the late Dr. Prout; while at the present time we have under our care a lady who was recently the subject of a *Herpes collaris*, which was represented by three patches placed in a horizontal position around the middle of the side of the neck, with one in the concha of the ear, and two immediately below and parallel with the clavicle: the attack was clearly attributable to a draught of cold air, and she suffered very severely from otalgia.

The forms of the eruption on the rest of the body are admitted by all observers; at the base of the neck and on the trunk, taking the curve of the anterior divisions of the spinal nerves, or following one or more of the trunks of the brachial plexus, or of the lumbar and sacral plexus along the limbs. Hebra calls attention to the possibility of the severe pains of intercostal *Herpes* previously to its development, and to a difficulty of breathing resulting from this painful state, being mistaken for pleurisy; and we have ourselves mentioned an attack of severe cardiac pain with tumultuous action of the

* The *Royal London Ophthalmic Hospital Reports*, and *Journal of Ophthalmic Medicine and Surgery*, October, 1866.

heart, which was naturally attributed to pericarditis, and of which the true nature remained unknown until an extensive Herpes zoster was thrown out, and the internal suffering immediately relieved

It is a noteworthy fact in connexion with Herpes, that together with its unilateral character, it should be so very rarely repeated in the same individual. Perhaps it may be in some measure to want of careful observation that this amount of rarity is so striking; on the other hand, we have another curious fact in its frequent repetition in the instance of Herpes labialis, and still more remarkably in Herpes præputialis, or progenitalis. The reason of this difference appears to us to be that the former is the consequence of a direct irritant acting on the trunk of the nerve; while the latter is the result of a reflex irritation operating on a small branch or upon the peripheral extremity of a nerve. The irritation of the mucous membrane, induced by a moderate amount of feverishness, such as that occasioned by a simple catarrh, is sufficient in young and sensitive subjects to induce a Herpes labialis; and a very moderate amount of irritation of the mucous lining of the urethra will, in the same manner, give rise to a Herpes præputialis, that may be repeated at regular periods for a twelvemonth or more. Mr. Paget records an interesting example in which a nocturnal emission resulted in Herpes præputialis, and was the means of explaining a phenomenon that had previously seemed almost unaccountable, and had excited a painful suspicion; namely, that previous attacks always followed connexion between the patient and his wife. When this fact was coupled with a theory entertained by some of the dependence of Herpes præputialis on syphilitic causes, the vexation of the occurrence will be immediately understood. Fuchs, it will be remembered, terms this form of the eruption *Herpes pseudo-syphilis*.

In taking leave, for the present, of our subject, we cannot forbear throwing a glance at one or two anomalies associated with this eruption. In defiance of the verdict of Pliny, "enecat, si cinxerit," Herpes zoster has been occasionally seen to complete its girdle around the body. Daniel Turner says he has seen such a case more than once; and Hebra remarks with regard to Herpes zoster faciei, that he has twice seen it bilateral, when it "appeared quite symmetrically on the two sides of the face, and gave the patient scarcely any pain." Furthermore we have the curious fact related by Hutchinson of the occurrence, at the same time and on the same patient, of Herpes frontalis of the left forehead, and Herpes zoster of the right side of the chest.

ON LEUCODERMA. By T. W. BELCHER, M.A., M.D. Dubl., &c.; Fellow and Examiner in Materia Medica and Medical Jurisprudence, King and Queen's College of Physicians in Ireland; and Physician to the Dublin Dispensary for Diseases of the Skin.

ON the 2nd of February, 1866, a lady called on me, at the instance of a physician in this city (Dublin), bringing with her her daughter, a healthy-looking child, aged six, about whose case she felt no small anxiety.

On inquiry, I ascertained that both the child's parents were alive and in good health, that the child's own general health was excellent, and that none of her family had ever been affected with the disease of which I am about to write, or with anything like it. No reasons could be assigned for the following facts, which I ascertained partly from her mother and partly by personal examination at the time.

About the beginning of the year 1865, some grey or white hairs first appeared on her head; they increased in quantity until a large portion of the hair at the right side of the head became white, resembling exactly the wax figures of heads of hair partly dyed and partly white, which may be seen in most hairdressers' shop-windows.

Over the front of the right side of the trunk, and in a lesser degree on the back, were to be seen small irregular patches of skin of a bright white glistening aspect. These patches were not, and did not include, either elevations or depressions of the surface, about which there was nothing that could be mistaken for tubercle or anything resembling it. On the right arm, near the elbow, was a small patch of what at a cursory glance seemed to be incipient psoriasis.

The diseased patches of skin were not unlike good vellum in appearance. I looked on the case as one of what is described in my edition of *Neligan on the Skin* (p. 363) under the name Vitiligo; and on comparison of the living subject with the plate in his (Neligan's) Atlas, I satisfied myself that it was so. The unaffected parts in the living subject appeared more prominent than the sound skin depicted in the plate.

The treatment advised was as follows:—

1. To take eight minims of the syrup of the iodide of iron thrice daily, in water.
2. To wash the diseased and neighbouring parts of the skin thrice daily

with a solution of common salt and water, and after each ablution to rub in some of the following ointment :—

R. Acidi Tannici, grana octoginta ; Adipis præparati, unciam ; Glycerini, semi-drachmam ; Olei Rosmarini, minima octo. Misce.

About three weeks afterwards this child was again brought to me, when I found that the bleached skin had extended completely round the body like a broad belt. It was now also apparent on the forehead, on the hips, and down the outside of the thighs, as well as on both feet. I directed the remedies already indicated to be continued, and as the child had a slight cough, I further prescribed for that symptom.

I never since saw or heard anything of this case, but, having succeeded in getting a rough sketch made of the disease, I exhibited it on the 8th of December last before the Dublin Pathological Society.

With reference to the name applied to this disease, Vitiligo (also called by modern writers Leucoderma and Leucopathia), I may observe that the term Vitiligo, applied by Willan to a tubercular variety of this affection from the fancied resemblance of the diseased integuments to the flesh of calves, was adopted by him from Celsus, who, in my opinion, described under that designation what is generally considered to be a different class of diseases ; I mean that now known as Psoriasis, or Lepra, and divided by him into three varieties — *ἄλφος*, *μέλας*, and *λευκή*. As I have elsewhere* fully examined the statements of Celsus regarding the varieties above mentioned, I do not deem it desirable to return to them here, especially as writers are by no means agreed touching his descriptions or definitions of disease. It is not easy to see why Willan adopted from Celsus the term Vitiligo, to designate an affection different from the disease described by him under that name, unless he considered that some connection existed between the veal-skin and lepra. In the present case I have remarked that there was what at a cursory glance appeared to be a patch of Psoriasis near one elbow. If this patch afterwards turned out to be Psoriasis—and on this point I know nothing further than I have stated,—Celsus would not have been far astray in connecting the veal-skin appearance with lepra under the general term Vitiligo.

Following Neligan, who followed Alibert,† I use the word

* In my edition of *Neligan on Diseases of the Skin*, p. 333, Dublin, 1866.

† Alibert called it *Achroma Vitiligo*.

vitiligo to designate this case, which of course will not be confounded with Willan's Vitiligo, a tubercular affection.

M. Hardy also calls this affection Vitiligo (*Leçons sur les Maladies de la Peau*, 2^e partie, 2^e édition, 1863, p. 9); and Mr. Erasmus Wilson would call it *Leucasmus figuratus*. I considered it to have arisen from a deficiency in the colouring matter of the skin; and beyond strict attention to the general health, with good but non-irritating diet, and such medical treatment as I have already detailed, I do not think much can be done for it; but I am not so hopeless as M. Hardy, who says: "Toute médication est inutile dans le Vitiligo, comme dans l'Albinisme."—(*Op. cit.*, p. 10.)

Mr. Erasmus Wilson, in his latest work, says:—"Leucasmus is a neurosis, and the result of weakened innervation of the skin, the excitant being commonly referrible to the organs of assimilation or reproduction. Occasionally, and especially in India, it may depend on the operation of a local irritant." He thus summarizes his treatment of it:—"Regulate digestion and secretion, give vigour to assimilation, and tone to innervation, and at the same time apply a healthy stimulus to the skin."—(*Student's Book of Cutaneous Medicine*, p. 416.)

The great variety of names applied to the same disease in cutaneous medicine is a serious stumbling-block in the way of writers and readers; the latter frequently understanding different diseases from those intended to be described by the former. In the present case I have endeavoured to some extent to meet this objection by identifying the disease here detailed with the names given to it by standard writers on Dermatology.

ON MOLLUSCUM SEBACEUM. By HENRY SAMUEL PURDON, M.D., Physician to the Belfast Dispensary for Diseases of the Skin, &c.

THE following case of this rare disease is, I think, interesting, inasmuch as no evidence of contagion could be obtained. Ann Johnston, æt. 16 years, admitted at the Belfast Dispensary for Diseases of the Skin on January 17th, 1866, is by occupation a servant, and has always enjoyed good health. The patient states that about two months ago the present disease made its appearance, and at present exhibits the following characters. The chin, left side of neck, and both arms, have scattered over them, small soft, round tumours, varying in bulk,

the largest being about the size of an ordinary hazel-nut. On both arms there are likewise several to be seen, gradually disappearing as the elbow-joint is reached. These tumours are of a buff colour, and sessile, unaccompanied by any pain; in a few places deep pits and cicatrices are apparent, probably caused by the disappearance of these growths. On the patient's chin, several of the smaller tumours struck me as bearing a great resemblance to Acne, and I believe that M. Caillault looks on this disease as a species of acne.

I cut two or three of these tumours open, when septa were distinctly visible, as also a thick fluid matter, which is considered to be altered sebaceous secretion. After the most patient investigation into the history of this case, I could not obtain the slightest information to prove the theory of contagion, nor did the disease prove so to any of her master's family or fellow-servants.

The treatment adopted was occasionally touching the tumours with glacial acetic acid, which made them shrivel up; cod-liver oil and the syrup of the iodide of iron being administered internally. The following statistics, derived from three large towns and in different spheres of practice, show the rarity of this disease. In 1,000 cases of eruptions of all kinds, three of Molluscum were seen by Mr. Milton, and two by Mr. Erasmus Wilson; in 1,204 patients, Dr. McCall Anderson saw only one case; while the present case is one in 668; making a total of seven in 3,872 cases of cutaneous disease of every kind.

ON INDICAN IN THE URINE IN ECZEMA. By
WILLIAM FRANK SMITH, M.B. Lond., Physician to the
Sheffield Public Hospital and Dispensary; Lecturer on
Medicine at the Sheffield School of Medicine.

OF all the dartres, Eczema is the most inveterate. Apparently cured by alkaline lotions, or other local applications, it returns with pertinacity. It would seem that this disease is the result of some more or less permanent dystrophy of the skin or of the system. One is inclined to look for this evil condition in the renal function, by several considerations. Considerations of the functional relations of the skin to the kidneys; of the large quantity of fluid excreted by the vesicles of Eczema; of the fact that in the analogous, perhaps homologous disease, Pemphigus, the fluid of the bullæ

has been found to contain uric acid and tyrosine. Some observations and analyses of mine seem still further to point to the urine as the key to the question. I have observed in a large number of cases that the urine of inveterate Eczema is what may be called a constant quantity. It is either colourless or a rich cider-colour. Specific gravity, about 1·017 to 1·022. It is acid, and remains so for many days. It has, in well-marked cases, a peculiar odour like that of cider. It does not contain sugar in appreciable quantities. Lastly, in nine out of ten cases which I have observed, it contains *Indican* in pathological quantities.

Indican is supposed to indicate a retardation in the process of declension from the complex to the more simple of the products of function and secretion. Its own highly complex formula is a strong evidence in favour of this view; also the ease with which it is broken up into leucine, indigo, glucine, &c. Is it not probable that in the case of Eczema, this retardation is due to the accumulation of urea and other products of waste in the blood, the accumulation itself due to deficient renal excretion? *Indican* is said to occur in large quantity in the reaction stage of cholera, in which the kidneys are so deeply implicated. Also in Bright's disease. Some analyses of the urine, and one of the blood of eczematous persons, favour this hypothesis. They are as follows:—

Mean results of ten volumetrical observations of the urine of William Penn, in-patient under my care at the Sheffield Public Hospital, convalescent from Eczema of both legs, under the use of alkaline lotions; taking no medicine, having full meat diet, and one pint of beer daily; taking daily exercise; age 47; excavator. Specific gravity, 1,018: quantity 1,200 cc.; containing in twenty-four hours—

Urea	...	...	...	...	...	22 grammes
Chloride of sodium	...	...	...	...	4	„
Phosphoric acid	...	...	...	...	4	„
Sulphuric acid	...	...	...	...	2	„

This patient was a robust man of middle height; with the exception of the Eczema, in florid health.

Case of — Dewick, æt. 23. Eczema of arms and hands; out-patient, taking no medicine, living in his ordinary manner as to diet and exercise. Mean of three analyses:—

Urea	...	...	...	...	...	15 grammes
Chloride of sodium	...	...	...	...	1·5	„
Sulphuric acid	...	...	...	...	2	„
Phosphoric acid	...	...	...	...	2·5	„
Specific gravity, 1,015.					Quantity, 1,000 cc.	

Case of J. Storer, æt. 27. Eczema of face and neck. One analysis. Quantity, 1,200 cc. Specific gravity, 1,020 :—

Urea	...	...	...	...	...	22·8 grammes
Chloride of sodium	...	...	...	...	...	4·2 „

These analyses certainly indicate an abnormally low excretion of urea and chlorides; still they are only few, and must be taken for what they are worth. Subsequently I have examined about 30 cc. of serum from the blood of the man Penn, obtained by cupping. *I found urea in considerable quantity.* I am waiting an opportunity to renew the observation.

In separating the indigo, I have adopted a new process, which is, I think, worth mentioning. I expose the urine mixed with an equal quantity of crude muriatic acid, for forty-eight hours in an open dish. I then filter it through a plug of asbestos, wash the asbestos, and dry it over vitriol *in vacuo*; then treat it with pure sulphuric acid at 140° F. After allowing it to stand for two hours, I separate it by expression, and washing with water, in the form of a beautiful blue solution of sulphindyllic and sulphindigotic acids. It is an interesting, if not very important fact, that the spectrum of this solution and of a solution prepared from common indigo, is exactly the same.

I enclose drawings of the two spectra, as compared by Mr. Sorby's microspectroscope.

ON ACNE AND ITS TREATMENT. BY MARRIS WILSON, M.D.

THERE are many very interesting discussions as to modes of treatment and details of cases spread about amongst contemporaneous periodicals, which, in the position they hold are little akin to the ordinary subjects treated of, and passed in review in those works. It is in the pages of a work devoted exclusively to Dermatology that they can find serviceable expression. The collection of such matters under a general head, although offering a disjointed and unscientific arrangement, may yet afford opportunity of useful thought, for more regular and attentive research, while occasionally empirical treatment may obtain a fair chance of confirmation by associated observations and inquiry. With the intention in view, of exciting interest in many important but desultory communi-

cations, their record will be made, if not always in the words of the writers, still with a strict desire to preserve their signification.

The subject of *Acne* is always one of considerable interest, not only from the frequency with which it is brought under the notice of medical men, arising from the personal annoyance occasioned to sufferers by its presence, but also from the diverse opinions held by writers as to its pathology.

In the French *Journal of Practical Medicine and Surgery*, edited by Dr. Chaillou, for November, 1865, there is a report on "*Acne and its Varieties*," noticed in the wards of the hospital Saint-Louis, superintended by M. Hardy. It thence appears, "that M. Hardy considers the eruption as an entirely local and accidental disease, in a great measure induced by a peculiar defect in the structure of the sebaceous follicles. He rejects all idea of a connection between *Acne* and any organic morbid condition of the system, and considers that all causes calculated to promote congestion of the face have a tendency to facilitate the development of *Acne*, to which, in addition, a peculiar predisposition exists in certain individuals."

The cases noticed were *Acne simplex*, *Acne indurata*, and as consequences of these, *Acne rosacea* and *Acne hypertrophica*.

Inflammatory *Acne* seems to occur more especially in young subjects. *Acne rosacea* and *Acne indurata* chiefly affect adults, and the aged are more liable to *Acne hypertrophica*. The report goes on to remark that "children are also frequently affected with *Acne*; but it assumes in general a moist form, and constitutes what has been called *crusta lactea*." This statement, however, had reference evidently to a different disease. M. Hardy advises the following treatment:—

1. Lotions every morning with tepid water, containing for every four ounces a teaspoonful of a solution of fifteen grains of corrosive sublimate, in five ounces of water.

2. Anoint the face at night with the following pomade:—

R Hydrarg. Protoiodidi, gr. v.; Adipis vel Cerat. cetacei, ℥j. M.

The patient, a female, subjected to this treatment, who had suffered from *Acne rosacea* for five years, showed marked amendment in twelve days; the number of the pustules had decreased, the eruption was less prominent, and the general suffusion of the countenance had faded away. After amelioration, if the disease remain stationary, the strength of the ointment may be increased to six, ten, and even fifteen grains of iodide to the ounce.

“In *Acne hypertrophica* this amount must be further augmented, and as much as equal parts of iodide and cold cream or lard must be prescribed. A layer of the ointment occasions considerable irritation and pain, but induces atrophy of the pustules. When these measures are inefficacious, M. Hardy resorts to mineral waters.”

In the same journal, for April 1866, I find a paper on the treatment of *Acne punctata*, by M. Davreux, a Belgian practitioner. The case was one of long standing on the forehead of a young man. The contents of the largest follicles should be squeezed out, and lotions of tepid water, continued for about five minutes, should be repeated three or four times a day, especially after accidental perspiration, or before exposure to a dry cold atmosphere. These lotions should be followed by the application of a cold astringent fluid, such as, for instance:—

℞ Alum. ust., ℥j. — ℥iiss. ; Aquæ, Oij. M.

After pursuing this plan for a fortnight, alkaline lotions, cold at first, and subsequently tepid, should be used. M. Davreux recommends the following:—

℞ Sodæ Bicarbonatis, ℥iiss. ; Aquæ, ℥xx. M.

The water should be but barely tepid, to avoid irritation of the skin or inflammation of the follicles.

M. Davreux has tested in succession the healing power of the protoiodide, of the iodo-chloride, and, finally, of the biniodide of mercury, and he now gives exclusive preference to the latter. The following is his formula:—

℞ Hydrarg. Biniodidi, gr. j.—ij. ; Adipis, ℥iiss. M.

After a few days the author increases the proportions as follows:—

℞ Hydrarg. Biniodidi, gr. x. ; Adipis, ℥iv. M.

One, or at most two, gentle frictions are daily performed with this ointment, and the parts should not be subsequently washed. This application produces in some instances a considerable amount of local irritation. The cold astringent lotions should then be used for a time, and a weaker mercurial pomade be again applied afterwards.

In the *Lancet* for 1864 is the notice of a case of *Acne rosacea* conducted by Mr. Thomas Foster Ker, of Manchester, that records a method derived from experimental treatment, and arriving at so successful a result that I am induced to wonder whether other trials should not be made to determine its efficacy.

Fresh root of horseradish (*Cochlearia Armoracia*) was applied to the face for another purpose, and the accidental cure of *Acne* resulted. The mode of exhibition is, two ounces of the compound infusion of armoracia, with ten drops of compound spirit of ammonia, and a little syrup of ginger, to be taken night and morning; a milk infusion of the fresh root to be used frequently as an application to the affected parts, and the avoidance of all stimulating liquors, with the occasional use of gentle aperients.

A clerical gentleman suffered particular annoyance from this disease for a period of five years. He had derived temporary advantage from the use of the solution of arsenic, four minims taken in porter three times a day. This plan succeeded for a week or two, but the pustules reappeared invariably at the end of that time. They at length presented so marked an appearance as almost to induce a suspicion of syphilis; clustered, very acuminate, and having a very inflamed base, occupying the apex of the nose, also a great portion of the right and left alæ. Both cheeks were patched with the *Acne* as well. He is a tall and rather muscular person, with a sanguino-nervous temperament. He had been very careful always of his diet, exercise, and abstained from stimulating liquors; but for the last few years he had had much mental excitement, more than his wonted habit, and had been also exposed to heated apartments and hot fires, from the effects of which he began to look anxious and pallid. His tongue was furred; his eyes were bloodshot; there was general debility; he became extremely impatient and irritable, though when quite well he was mild and enduring. His physical and mental prostration resulted in an attack of *Acne rosacea*. The treatment specified above seems to have ended with an entire success.

Under the same heading, "Treatment of *Acne rosacea*," the following remedy is very highly commended by Dr. Scelles de Monsdesir:—One tablespoonful of the syrup of *Diplotaxis muralis*, to be taken with twenty grains of bicarbonate of soda three or four times a day. As an external application, borax in distilled water, two drachms to eight ounces. We find also advised, as an unfailing remedy, the free application of an ointment every night composed of two drachms of iodide of sulphur, well mixed with one ounce of lard. In another case two or three grains of quinine were given daily, and the affected parts washed with juniper-tar soap night and morning. Cod-liver oil has also been advised as an infallible means of relief in inveterate cases.

Individual observations such as these, standing alone, have

very little influence on general treatment, but when collected together, as they should be, some useful suggestions may arise from their consideration.

ON MOLLUSCUM SIMPLEX. By IZETT W. ANDERSON, M.D
Edin., Kingston, Jamaica. With a Photograph.

HENRY McCOY came under my care in the public hospital of this city during the time I was in charge of that institution as principal medical officer. McCoy is a black man, residing in a country parish, married, with a large family, and by occupation an agricultural labourer.

With some difficulty, owing to the obtuse intellect of the patient, I have been able to glean from his own lips the following history of the disease under which he now suffers. He informs me that about the age of puberty, or shortly after, several small tumours made their appearance on his back, and that since then, up to the present time, they have gradually increased in size, and also appeared in other parts of the body as well as the head and extremities. Three or four years ago the genital organs became affected in a manner which will be more particularly described hereafter. The formation and growth of these tumours was preceded and accompanied by a pricking, burning, or lancinating pain in and around the situations where they appeared. Although the majority of these growths arose in portions of the skin that had never been injured or abraded in any manner, yet the patient informed me that almost every cut or scratch of the skin, however trivial, was almost certain to be followed in a short time by the development of a tumour in the cicatrix. In illustration of this, he pointed out an elongated tumour in the upper part of the left groin, which he stated followed almost immediately an accidental cut from a saw. The patient further states that none of his relations have ever been affected in a like manner, and that he has never even seen any one with a similar disease. His wife and children are all healthy. He denies ever having had syphilis, and does not appear to have suffered from malarial disease to any extent.

The patient is a man about forty-five years old, muscular, well nourished, and generally healthy in appearance. The right leg is considerably shortened, in consequence of an un-united fracture of the tibia and fibula, which occurred in childhood. Almost the entire surface of the trunk, both before and behind, is thickly studded with tumours of various sizes; in fact,



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MOLUSCUM SIMPLEX.

there are hardly three square inches of skin in which one of them does not exist. They also exist, though not so numerously, on the head, neck, and face, and the upper and lower extremities. They exist in the least numbers on the lower extremities, particularly the right one, while in the lower part of the back they occupy nearly the whole of the skin covering that region. As before mentioned, the genital organs have become affected. The scrotum is much hypertrophied, and presents the same appearance as seen in the common form of Elephantiasis Arabum, as it occurs in this island. It is heavy, rugose, semi-elastic, and slightly fluctuating to the touch, and if strong and long-continued pressure is made with the point of the finger, a slight pit is formed. The orifices of the cutaneous ducts are very much enlarged, and would permit the entry of a fine probe. The penis is affected in a similar manner, and at its root is nearly three inches thick, and the glans is bent at a right angle to its body. This angular condition of the penis was produced only about nine months ago by the patient drawing back the prepuce and being unable to return it; a permanent condition of paraphymosis was thus produced. The prepuce thus reflected is much hypertrophied, and a portion of it is more than an inch thick. On the pubes several tumours exist, distinctly defined, and also on the upper part of the scrotum; but lower down they appear gradually to merge into the general elephantoid condition of that part.

The tumours carefully examined present the following characters. They vary very much in size, from a small split-pea up to a large pigeon's egg. The smaller ones just commencing their growth look and feel exactly as a piece of skin would if tightly stretched over a number of swan-shot. Many of the larger tumours are raised an inch above the surface. They are generally irregularly circular, or ovoid in shape, and many are flattened at the surface, and the same diameter from the base to the extremity. Others, again, have a rounded surface, and appear to have expanded in their growth, and a distinct neck to the tumour is thus formed. When several of the tumours are in close proximity, as in the back, they press on one another, and their free surface is thus considerably altered in shape. In nearly all the tumours, the skin is adherent, and thoroughly incorporated with its structure; and this condition exists even in the smallest, and in situations where the clothes can produce no pressure. In these the skin has a dull shining aspect, and I cannot do better than liken it to a piece of old, very dark-coloured gutta-percha tissue, thrown into minute wrinkles. No exudation, no crust, no scurf of any kind, exists on the surface of these tumours. In a few, however, of the

tumours, this peculiar condition of skin does not exist ; for it is completely non-adherent, and can be pinched up in a fold and freely moved to and fro. This is the case only with a few of the largest ones, as that on the back of the left hand, those on the back of either fore-arm, and the two just above the left knee. Tumours, however, of equal size exist on the back, in which the skin is firmly adherent. All the tumours feel firm and solid, but possess a slight degree of elasticity. In a few of the largest, one or two hard points can be felt, as if nodules of cartilaginous matter were imbedded in the morbid structure. None of the tumours have formed deep adhesions, for they can easily be lifted from the subjacent tissues. No hair grows on any of them. None are ulcerated, and none ever have ulcerated. He has not the slightest wound or ulcer on any part of the body.

I removed two of the smaller tumours for the purpose of microscopical examination ; and smart, arterial oozing ensued, which required the use of pressure and styptics to check. On making a section of one of the tumours, the cut surface to the naked eye is very dense and of a pure white colour, and looks very much like a section of a raw turnip, or a piece of bacon fat, and the simile would be rendered almost perfect could we imagine these articles infiltrated with a glairy albuminous fluid. On examination under the microscope, with a power of about 280 linear diameters, it is found to consist principally of fibrous tissue. The fibres are arranged in large thick bundles, here and there slightly undulating in their course, which are interwoven in such a manner as to enclose loculi which contained plastic matter apparently undergoing the process of cell-development. On strongly squeezing the tumour, a drop or two of glairy albuminous fluid could be made to exude, and this was found to contain numerous granules and cells, many of the latter assuming a fusiform condition. In the tumours I examined there was no appearance whatever of a capsule, and the skin appeared to be thoroughly incorporated with the morbid tissue. I could not obtain the patient's leave to remove one of the larger tumours, in which the skin was non-adherent, and am therefore in ignorance of their minute structure, but I should suppose them to be very similar.

I have thought the details of this case, illustrated by photographs of the patient, might be of interest to the profession, from the rarity of such an affection, not only in England, but also in the West Indies. I was at first a good deal puzzled as to its real nature, and several medical men in this island to whom I showed the case were equally at a loss when asked to

name the disease. I have been many years in extensive private and hospital practice in the West Indies, and some of those I consulted have been practising here between twenty and thirty years; and to all of us such an universally diseased condition of skin as this man possessed was something entirely new. The case has been regarded as molluscum, or one of the multiple development of tumours, either of a fatty, or fibrous, or keloid character. And one or two of the tumours having been removed and minutely examined, all doubt as to their nature is, I think, now at an end.

The case is evidently one in which a tendency exists to an abnormal hypertrophy, and condensation of the fibro-cellular element in and beneath the skin. In short, I consider it a case in which what may be termed the keloid diathesis exists to a very unusual extent. Keloid tumours are of very frequent occurrence in the West Indies among the black and coloured races, and the tumours with which my patient was covered, presented all the characteristics of this disease, except the few in which the skin was non-adherent; but I had some doubts whether it could exist to such an extent, and therefore hesitated for some time to consider it as an example of this disease, and until I used the microscope could not make up my mind definitely on the subject. I find, however, that Professor Gross, an American author of a large and valuable "System of Surgery," notices in this work having met with one or two cases in which the body was literally covered with keloid tumours; and perhaps if I had the opportunity of consulting a large library of medical and surgical works, I might meet with notes of one or two similar cases.

It is a matter of some interest to notice the fact that in the patient suffering from these tumours, elephantiasis of the scrotum and penis existed in a well-marked form, and that one condition became insensibly blended with the other. In both these forms of disease, the fibro-cellular tissue in and beneath the skin is hypertrophied and condensed, and in both an albuminous fluid is infiltrated into the morbid tissues.

ECZEMA AND ITS TREATMENT. By Dr. W. FRAZER, M.R.I.A.; Hon. Member Med. Chir. Society, Montreal; Late Examiner to the Queen's University, Ireland.

THE object of this paper is to offer some remarks of a practical nature upon the important subject of Eczema with special reference to its treatment; they are based upon an examination of tabulated records that embrace all cases of

cutaneous disease which occurred in my private practice during two years—1865 and 1866.

Eczematous eruptions afford a favourite field for investigation. The constitutional causes on which Eczema depends, its pathology, its varying symptoms and their treatment, have in their turn attracted attention and well repaid such labour. Nor is the relative frequency with which those rashes appear, when compared with other classes of skin affection, altogether devoid of interest. Including every grade, from mild to most severe, the total number of attacks registered during 1865, amounted to about 22 per cent.; they were higher in 1866, being near 35 per cent.; the sum of both years yielding an average that coincides with the deductions of several accurate observers. Thus Erasmus Wilson, in his *Inquiry into the Relative Frequency, the Duration, and Cause of Diseases of the Skin*, 1864, ascertained that 1,000 consecutive cases, taken from his private practice, gave a ratio of 30 per cent. of eczematous disease; whilst Dr. Hillier, who registered the cases presented at University College Hospital during two months, states that the proportion he observed (less than one in five) was about 17 per cent.; and Dr. M'Call Anderson, at Glasgow, when the gross numbers of two years' admissions to his dispensary are calculated, offers near 24 per cent. for the average in that city. It would appear from comparing these statistics, that Eczema must prevail with remarkable uniformity in England, Scotland, and Ireland, apparently attacking individuals belonging to the higher classes more often than their humbler fellow-citizens, though this deduction should perhaps be reversed if allowance is made for somewhat greater attention being devoted to preserve a healthy condition of the skin by those placed in comfortable circumstances compared with persons obliged to seek for dispensary or hospital relief.

An occasional retrospect of the experience acquired in treatment has several advantages. It recalls certain opinions and lines of practice which wider acquaintance with morbid action demonstrates to be imperfect. It renews to our recollection past triumphs obtained over disease; it points with encouragement to the progressive improvements in our art, and raises hopes of greater success. Should the suggestions offered in this paper, based on such a retrospect, assist in preventing serious mistakes, simplify the rules for practice, or render its results more certain, I shall feel satisfied. When objections are urged against any special treatment, they have originated in the conviction that the point in question demands further canvassing: the decision must rest altogether with the reader.

Debateable grounds exist in every department of practical

medicine, and therapeutics admit to a peculiar extent of differences of opinion; the complex data on which they are based are fluctuating and liable to varying sources of error that appear incapable of elimination. Add to this the extreme difficulty of escaping from traditional limits of routine treatment; the opposite error, prevalent in the present day, of complete scepticism respecting the remedial properties of medicines, which has culminated in the expectant system and in homœopathy; the danger of basing our practice on insufficient and unsound hypotheses, of mistaking assertions for reliable facts, of confounding apparent coincidences with ascertained results, all of which are liable to occur in proportion to our neglect of those powers of observation and deduction which are essential for the successful study of medicine in common with every other true science.

The principal mistakes made in treating cases of Eczema that appear to me deserving of remark are shaving the hair, using constant lotions and damp applications, sulphur and sulphur baths, different local remedies of too exciting and stimulating character; and, though advocated by authorities whose opinions deserve the highest consideration, I would object to preparations of arsenic given internally, unless for special exceptional attacks, such as present closer relation to genuine scaly psoriasis than to the typical exudative Eczema.

The scalp is a favourite location for Eczema in all its varieties: these range in severity from simple erythema with increased formation of furfuraceous dandriff and slight itching through decided pityriasis to copious ichorous discharge, matting the hair, and when it exudes, forming thick concreted crusts that cover over red excoriated surfaces, the entire resembling the effects produced by severe blistering with cantharides. Along with these, separated from them by imperceptible gradations, must be ranged the impetiginous eruptions common in delicate children, and liable to attack adults whose constitution is impaired or vital energy so deficient that pus is secreted instead of simple ichorous fluid or increased epithelial formation. When treating any of these cases, it is unnecessary, and therefore a mistake in practice, to remove the hair unless obliged by some special reason unconnected with the eruption, a contingency that must seldom happen, for during two years past it has not proved requisite to have recourse to this extreme measure in one solitary instance. This statement is corroborated by the opinion of almost every recent observer who has studied skin disease. Thus Erasmus Wilson remarks, "When the means of cleanliness are not easy of access, it may be necessary to remove it (the hair); this is a practice, however,

which we have never occasion to adopt." (See "Student's Book of Cutaneous Medicine," p. 97.) Still it is too common to see men and, worse still, women, presenting themselves for treatment disfigured by having their hair destroyed, the mischief resulting from a few minutes' carelessness requiring months for its reparation. Nor is shaving the head the utmost limit of ingenuity. Within a few days past a young lady from the country, who suffered for some years with ordinary ichorous Eczema, displayed in my study a considerable portion of the front of her head depilated by a pitch plaster with such complete success that she remains bald and marked with scars for life. The blame does not rest on the profession: it resulted from the energetic labours of an amateur practitioner.

Many individuals regard with stolid indifference the existence of a serious chronic eruption on their bodies, and will allow months or years to elapse before they think of applying for assistance. This obtuseness would surpass belief unless our daily experience, corroborated by the sufferer's voluntary confession, confirmed the statement. Above one-half of all these cases of Eczema which came under treatment during the past two years had continued for upwards of twelve months. Several admitted having suffered for periods ranging from one to fourteen years. One acknowledged the persistence of his disease, with brief intervals, for twenty-five years; and one had suffered for thirty years almost continuously. This strange apathy is noticed by all who have seen much of Eczema. It is a serious mistake which there is little hope of combating. After, however, the patient has sought for medical relief, it becomes indeed distressing to witness the futile attempts sometimes made in that direction, the unavailing or erroneous courses of treatment adopted and persevered in with confidence worthy of better results. Such efforts have their natural termination in disappointment, and after inevitable failure has resulted, then the discouraging prognosis is offered that "the disease is incurable," or that "it will last for years—perhaps for life—before wearing itself out." These are not fancy sketches; both assertions were made to patients who consulted me for simple eczematous affections, and who are at present recovered and in perfect health. With these deserves to be classed another error in practice of similar description. Having exhausted their own and the sufferer's patience, as a last resource an expensive, troublesome, and altogether needless sojourn at some foreign watering-place is insisted on. It is needless to cite illustrations of these mistakes; though serious, they are common. Their prevention will depend upon the general adoption in practice of each

positive advance made in cutaneous medicine, and they will disappear when the rising generation of medical practitioners qualify themselves to recognize and treat with efficiency at least the ordinary varieties of skin disease.

Sulphur is worthless for Eczema; it is seldom given in this country. Baths of sulphuretted hydrogen, whether natural or artificial, are not required. The complete change of scene and air associated with their use in a distant locality, and, more important still, relief from sources of mental irritation and exhausting toil of mind and body, would account for mild chronic Eczema sometimes disappearing under their employment, independently of any supposed medical properties residing in the waters. Past experience disposes me to regard them as unpleasant, inefficient in the majority of attacks, and decidedly injurious to some persons.

The following case seems to point out some lines of practice objected to in this communication :—

A lady, aged 26 years, consulted me for Eczema, which had continued for two years, attacking her body, limbs, and head. She stated the rash became much worse about five months since. Scattered over her chest and limbs were numerous large scurfy blotches. She wore artificial hair, and her head was shaved every week. Soft pink patches, discharging ichorous fluid, covered the greater part of the scalp, and extended over the forehead; the ears were thickened, excoriated, and crusted with dried yellowish secretion; of late she remarks that fresh outbreaks of her disease attack half the head alternately, one side healing and becoming itchy when the other feels scalding and pours out much fluid; the habits were regular; she lived well, using meat at every meal, and porter and wine daily; symptoms of deranged digestion and frequent acidity of stomach were complained of. Being on the Continent when the Eczema became severe, she sought for relief; her hair was at once removed, and the following treatment ordered :—

“Prendre le matin ou le soir une des pilules suivantes pendant trois mois (Pilules Asiaticques, No. 60).

“En même temps deux bains des Barèges artificiels par semaine, et faire des frictions sur les parties malades avec la pommade à l'iodure de soufre, ou à l'huile de Cade, ou au Goudron, etc.

“Si dans trois mois on ne juge pas convenable de continuer le traitement, je conseille l'usage du soufre sublimé à l'intérieur, à la dose de 30, 40, ou 60 centigrammes par jour, pendant un an ou deux ans. Tisanes amères. De temps en temps purger la malade avec une bouteille d'eau de Sedlitz.”

This lady's case was mismanaged; her hair removed, replaced by a wig, and the head directed to be kept shaved without adequate cause. The Barège baths, according to her experience, produced decided increase of pain and irritated the eruption. The ointments were used in turn; they stimulated the scalp severely, so that it was made raw, like the effects of heavy blistering. Little attention was paid to her disordered digestion; no

restraint attempted in her diet. The arsenical pills received sufficient trial and proved incapable of controlling the disease. It would appear that her attendant placed slight confidence in his remedies if they required a year or two before effecting a cure. Full details will be given of the treatment which succeeded in this and similar cases. At present it is needless to state more than the result. Her recovery was tolerably rapid and permanent.

The instances in which patients had previously tried sulphur or sulphur-baths were rather numerous. A lingering belief in the efficacy of sulphur for all forms of chronic eruption still exists, and leads to its being occasionally given. Some of the attractions of Harrogate or Barège waters and artificial baths of hepar sulphuris seem to depend on their offensive odour. The resources at our command afford several preferable remedies, so that we can well dispense with sulphuretted hydrogen.

The case now given illustrates the mischief resulting from constant damp applications.

A gentleman, æt. 30, stout and healthy, of temperate habits, presented himself in May, 1865, having both legs eczematous, and scattered smaller patches of rash over his arms and body. His limbs were swathed in damp cloths covered with oiled silk; when he removed them, the confined moisture escaped in dense steam, the skin was raw from the knees to the toes, deep red, sodden-looking, and ulcerated, numerous ecchymatous depressions, the size of split peas, being disposed in groups over the legs. This eruption had lasted about nine months; six weeks before consulting me he became attacked by a succession of boils, which he attributed to the excessive heat caused by the damp applications and constant bandaging.

This case improved with remarkable rapidity, after discontinuing the lotion; by using citrine ointment diluted with a large proportion of glycerine and absorbent dusting powders, suitable constitutional treatment being employed at the same time, the rash almost disappeared within fifteen days, and was completely healed in three weeks, a result gratifying to the patient; for after a previous consultation he was informed that the disease was almost incurable, and would at least last for several months.

The treatment required in cases of Eczema divides itself into those internal constitutional remedies which are of primary importance, next local applications that at least relieve special symptoms, and tend to shorten the period of recovery.

It is admitted by all competent observers, that preparations of the metal arsenic exercise a powerful alterative influence over chronic cutaneous diseases, and in the present day it would be impossible to treat those diseases with credit unless we availed ourselves of the advantages derived from their use. When employed with ordinary precautions they are entitled to

the praise of being manageable, efficient, and perfectly safe remedies, so that timidity or inexperience alone could deprive a patient of the opportunity of benefiting by their remarkable action. The absolute limits that should restrict their application is a different question that deserves dispassionate investigation; for assuredly arsenic is no specific, nor is its empirical use in practice to be commended. Preparations of arsenic are possessed of powers of healing, that place them beyond rivalry for the different squamous eruptions belonging to Willan's "Lepra" and "Psoriasis." They are of service in some cases of Eczema, which border close on genuine psoriasis; and masters in our art have advocated their use in all the chronic forms of Eczema characterized by serous discharge. This is an opinion based on the result of extensive experience, and entitled to the utmost consideration, and I have ventured to dissent from views supported by such authority with diffidence. The line of practice which has proved most successful in my hands consists in employing vegetable tonics, with iron and colchicum for exceptional cases, when symptoms of chlorosis and anæmia or of gout are present. Sometimes cod-liver oil was given, and, above all, small continued *alterative doses of bichloride of mercury*, on which I would particularly rely. Separate investigation of the special circumstances of each case is indispensable to ascertain the state of digestion, of the nervous system, and, in females, whether the uterine functions are deranged. Mental anxieties appear to constitute a frequent predisposing cause of eczematous eruptions; dyspeptic symptoms are often complained of. In some the nervous system is more implicated. Such cases are attended with pruritus out of proportion to the eczematous rash, or persisting after the eruption is cured. For this class of persons, strychnia given in minute doses is invaluable.

Eczematous patients are suffering from a disease of debility, hence the great advantage of tonics. Preparations of yellow cinchona and cetraria are most useful; the syrup and tincture of cinchona for children, the decoction and infusion for adults. With these are combined alterative doses of oxymuriate of mercury, one-twentyfourth to one-sixteenth of a grain thrice daily, seldom exceeding the latter quantity. When the dose was properly regulated, I never found it disagree or cause a single unpleasant symptom. Tablespoonfuls are liable to such variations in quantity, that it is useless ordering them. The certain plan when giving important medicines is to direct an empty half-ounce phial for each patient, which measures the exact quantity required; for, in the anxiety to recover, it is common to take medicine in over-large doses, unless restricted by

measurement. One other precaution is worth mention: the morning dose answers best when taken during or after meals.

Should attacks of Eczema alternate with gouty paroxysms, or when imperfectly-developed gout is lurking in the system, small repeated doses of colchicum prove an inestimable addition to the treatment with bark and mercurials. Some of these cases are obstinate, when occurring in persons whose health is greatly broken down; it will sometimes be found our efforts at improving the general health are liable to result in a severe fit of gout; that, of course, requires suitable medical treatment. Afterwards, when health becomes re-established, daily doses of citrate of lithia are of service, given with some aerated fluid as Seltzer or soda water; or genuine lithia water can be used.

Decided dyspeptic symptoms were present in the majority of cases; they demand strict attention to dietetics; acidity of stomach was relieved by full doses of bismuth and bicarbonate of soda, taken about an hour after the principal meals. It always disappeared as the patient recovered. Drastic purgatives were never employed; when aperients seemed necessary, the mildest, such as rhubarb, answered best.

In a few exceptional instances, severe pruritic sensations were complained of, in undue proportion to the severity of, or extent occupied by, the eruption; or they continued to cause distress after the eczematous patches had healed, sometimes extending over parts of the body where no rash had been developed. This hyperæsthesia of the sensitive cutaneous nerves was alleviated by friction with liniments containing aconite and belladonna. Small doses of strychnine, ranging from one-twentyfourth to one-fiftieth of a grain, given thrice daily in solution with dilute phosphoric or nitric acid, and infusion of cloves or orange, afforded permanent relief in every case. The attacks requiring this treatment were exceptional.

With some females and a few males the condition of the blood required attention; anæmia was present, and after commencing the treatment with tonics and oxymuriate of mercury, it was supplemented by chalybeates with good effect. Ammoniated tartrate of iron, ʒij. ; citrate of iron and quinine, gr. 40 ; citric acid, gr. x. ; dissolved in a wine-bottleful of sherry, and half a wineglassful taken twice daily, is an agreeable mode of giving iron. There were two instances of Eczema occurring in persons advanced in years, for whom this chalybeate treatment was of material advantage.

The following case affords a striking contrast in the results obtained from the two mineral alteratives. Arsenic received

more than fair trial for years and failed. The mercurial produced rapid and permanent relief.

A gentleman, upwards of 50 years of age, weighing sixteen stone, was seen in 1864. He admitted he lived freely, his daily allowance consisting of some glasses of whisky and three bottles of Bass's ale. For fifteen years past he observed an eruption on his body and head; at first it used to disappear for weeks, but has never left him of late. The rash forms large, rough, red patches on the limbs, groins, and between the buttocks; smaller spots occur over the back and chest, and through the hair. He suffers from burning and itching sensations, that cause him to tear the affected parts until they bleed. The spots pour out small quantities of moist secretion at intervals, and slight scales can be detached from the arms, but not elsewhere. He has used arsenical preparations freely; for one year he took Donovan's solution, commencing with seven-drop doses, and gradually increasing until he reached thirty drops, thrice daily (ninety drops each day). For nine years past he has habitually employed Fowler's solution, with trivial intervals, taking seven drops with his meals thrice daily, and he attributes to it increased appetite and his tendency to form flesh. To have Hydrarg. Oxymur. gr. iss. in (equal parts of) decoction of cetraria and infusion of bark, ℥xij., ℥ss. thrice daily with the meals. To apply Hydrarg. Iod. Rubri gr. vj.; Iodid. Potas., gr. vj.; Glycerinæ, ℥j, to the spots until irritation ensues, and if possible moderate the use of stimulants.

His ordinary medical attendant wrote in two months to state that the eruptions had all disappeared, except a small patch the size of a five-shilling piece over the left elbow. The local treatment was continued, and he took small doses of iodide of potassium with decoction of bark internally.

Rapid recovery from Eczema after months of unavailing treatment by arsenic:—

A lady, æt. 30, married, with a family, and at present pregnant, apparently in average health, but of nervous and desponding disposition, complains of severe Eczema capitis, lasting upwards of a year and a half. It commenced on the back of the head, spread to the ears, which are much affected, and of late has extended over her forehead and temples. The diseased parts are soft, pink, and pour out much secretion, that concretes into thick crusts. She attributes her illness to grief and despondency after the death of a child. Has been under treatment for a considerable time, using arsenic in different forms, and at present is taking pills of iodide of arsenic. The results are so discouraging that she considered herself incurable, and her object in consulting me was to obtain confirmation of her own conviction.

June 17th.—To take an aperient of solution of magnesia and lemon-juice; wash the hair with yolk of egg and tepid water, and then commence decoction of Bark, ℥viiij., Hyd. Oxymur., gr. ss.; ℥ss. ter die: applying the following cerate freely to all the affected parts,—Unguent. Hydrarg. Nitrat., Unguent. Cetacei, aa. ℥ij.; Glycerinæ, ℥ij. Misce.

23rd.—Appetite and spirits better; eruption much improved; feels free from burning heat in her head, and the back of the scalp is drying up; the skin is itchy at intervals.

30th.—Slight recurrence of Eczema. To lessen the quantity of sugar, which she uses in excess.

July 4th.—In excellent health ; the eruption has dried up and faded. The treatment was continued for about a fortnight longer, to prevent relapse. She has since remained quite well.

In this lady's affection arsenic was tried with perseverance and proved of little advantage ; she obtained relief from the glycerine pomade, which is the best topical application that I am acquainted with for eczematous eruptions. Its advantages will deserve special mention when speaking of topical remedies.

Chronic Eczema of ears, head, and neck, unsuccessfully treated by arsenic :—

A lady, æt. 40, residing in a healthy district near the seashore ; married ; but unhappily and for years placed in distressing circumstances, was attacked about seven years since with Eczema in the head and ears. It has continued, with trifling intervals, to the present time.

The lobes of the ears are thickened, the meatuses almost closed. There is much excoriation in and around them ; the hair is matted with white crusts, and distressing itchy sensations render her unable to refrain from tearing the head ; from time to time fresh outbursts of serous secretion occur, when the scalp becomes the seat of intolerable scalding, or burning heat. She states that her digestion is feeble and acidity of stomach of frequent occurrence. Has used Fowler's solution without benefit, though she persevered in its use for several weeks, and tried numerous local applications, which gave at best temporary relief.

June 12th.—To take decoction of Bark and Cetraria, ℥xij., with Hydrarg. Oxyuriat., gr. ij. ; ℥ss. ter die. Wash the head twice each week with yolk of egg and tepid water, and apply night and morning the pomade of Glycerine and Citrine Ointment. To relieve the acidity of stomach, the following powder was directed :—

℞ Bismuthi Trisnitratis, Bicarb. Sodæ, aa. ℥iss. ; Pulv. G. Arab., Sacch. Albi., aa. ℥ij. ; Olei. Cinnamomi, gtt. ij.

About ℥ss. to be taken in water an hour after each principal meal.

July 1st.—Feels much better in health, the eruption is disappearing, and the induration of ears greatly decreased ; has no itching or uneasy sensations.

July 13th.—Reports a steady improvement, and considers herself well. To persevere in her treatment for a fortnight longer.

The leading principles which regulated the constitutional treatment of Eczema having been already described, it is unnecessary to offer many examples of cases that would vary principally in minor details. The leading complications that required most attention were gout in its different phases,

whether atonic, latent, or sthenic; depraved conditions of the blood requiring the assistance of chalybeates, and those special attacks distinguished by excessive cutaneous hyperæsthesia, for which strychnia appeared the best and most reliable remedy.

Dyspeptic symptoms were so common they were always looked for. I would ascribe their disappearance as the patient recovered from his Eczema, to the improved state of health induced by the tonics and mercurial alterative, though the antacids and bismuth gave transient relief, and perhaps to some extent assisted in restoring the gastric mucous membrane to better tone.

Eczematous eruption treated by arsenical preparations and sulphur-baths, without benefit. Cured by strychnia :—

Rev. Mr. ———, æt. about 30, has lately fallen much into flesh; states that his mind has been greatly overworked, and that he perceives his powers of thought confused and imperfect. For six months past he has suffered from eczematous patches on the legs. They first appeared on the thighs, where they have healed. He has tried arsenical preparations under good advice, and used sulphur-baths at the Brig of Allan, without avail. He consulted me, whether he should visit Harrogate, to which he was ordered by another practitioner.

The indication in this case was to restore the impaired nervous energy. Exhausted by overwork, this was assisted by an exchange of ministerial duties for some weeks to a pleasant neighbourhood. Bismuth and soda were recommended after meals for the decided acidity of stomach and sluggish digestion that attended his attack. The pomade of glycerine and dilute citrine ointment was applied night and morning to the eruption, then dusted over with an absorbent powder of oxide of zinc and corn-flour, and secured with light bandaging. He also took the following mixture :—

℞ Strychniæ, one grain; Acid. Phosphoric dilut., ℥iij.; Tincturæ Aurantii, ℥ss.; Infusi Caryophyll., ℥xj.: fiat mixtura. Half a fluid ounce to be taken thrice daily.

In a few weeks he called to report himself perfectly recovered.

So much for the constitutional treatment of Eczema; with reference to topical application, when the disease is situated on the limbs or trunk, an occasional washing with good clear yellow soap and tepid water is excellent for ordinary purposes of cleanliness. When the skin is much excoriated, and the eruption in an irritable state, shown by repeated fresh outbreaks of exudation, bran baths are pleasant and afford relief to the painful itching; they loosen the adhesive crusts, are of service for cleansing the skin at intervals from the dusting powders and other applications required for treatment, and

give special comfort to patients who are recovering from widespread rashes over the body and extremities.

For those cases where Eczema occupies the scalp, yolk of egg mixed with an equal quantity of water is the best detergent I know of. It requires thorough rubbing with the hand into the roots of the hairs, and should then be washed out with abundance of tepid water, and the head dried with soft towels. I have used an emulsion of almond oil and lime-water in some instances, to soften and remove scurfy dandriff, with good results. Irritating the skin with hard brushing and the use of fine-tooth combs are injurious practices. If possible, tearing the affected parts with the nails ought to be avoided.

Here, however, the advantages of baths, &c., end; they are needful for cleanliness; they are of service when the disease has declined, to preserve the skin in a healthy state; they exercise no beneficial influence over the eruption in any stage—indeed, in all attacks of severe Eczema, moist applications appear injurious, and, when long continued, are decidedly bad.

Lotions were seldom prescribed. A weak lead lotion was occasionally applied in acute eczematous outbreaks, to alleviate the scalding pain, and with a faint hope of its controlling the serous discharge. The results were rather disappointing; a common complaint after its use was that it seemed to “contract the skin, and render it tight and uncomfortable.”

Pomade of Citrine Ointment diluted with Glycerine.—This preparation requires to be well made with good glycerine of full sp. gr. Genuine Price’s glycerine answers the purpose. When properly mixed, it forms a perfect creamy emulsion, that remains permanent for several days, and remixes readily with agitation. I have derived the greatest advantage from this preparation, and should be glad that it received a trial from others. When the eruption occupies the head, the emulsion is applied like ordinary pomade, of course to the roots of the hair and to the seat of the disease. It softens incrustations, penetrates through the dense scales of pityriasis to the morbid tissues, and effects wonderful improvement in the secreting surfaces. The difficulty on the limbs or body is to keep it in contact with the affected parts; this is best accomplished by rubbing the cerate with a miniature mop of lint secured on a wooden pen-handle, well into all the diseased tissues, then sprinkling over the spots some mild absorbent dusting powder, and covering all with a layer of soft lint or old linen, and light bandaging. The frequency with which the application requires to be renewed depends on the quantity of discharge thrown out; if slight, every second or third day suffices, touching those points in the intervals every night,

or night and morning, where the exudation has softened or removed the crust of dusting powder. In more aggravated attacks the parts require fresh dressing twice every twenty-four hours for the patient's comfort, and to secure a speedy result. When severe itching is complained of, a good rubbing with this ointment affords relief, and is the safest means of "scratching" the part.

Formula for Glycerate of Nitrate of Mercury :—

R Unguent. Hydrarg. Nitratis, Olei Olivæ vel Unguenti Cetacei, aa. ʒij.; tere et adde Glycerinæ ʒiss., Olei Amygdal. Essent., gtt. vi. Fiat unguentum.

The strength of this preparation admits of being varied *ad libitum*. When Eczema attacks the hands and fingers, the affected parts are best preserved in contact with the glycerate by using light cotton gloves in the day, and at night covering the hands with soft stockings, which are preferable to bandaging, being less retentive of heat. In this local variety of Eczema deep fissures often form. I know of nothing equal to strong nitric acid for inducing rapid healing of these painful cracks; it requires to be applied with a light hand, and restricted to the fissured parts, though, in some instances, when the patient complained of intolerable irritation in the seat of the eruption, nitric acid was used with good results over the entire morbid surface, laid on lightly, and afterwards well washed with abundance of tepid water. A cerate of red iodide of mercury is another useful topical remedy, prepared with or without the addition of iodide of potassium, the advantage of which is that it renders the ointment colourless. This was used of different strength, ranging from six to twenty grains in the ounce of cerate, according to the effect required. When rubbed over limited patches of chronic Eczema, a single application has excited sufficient irritation to cause rapid healing afterwards, and in those tedious rashes where the disease had assumed a passive asthenic condition, or where it was distinguished by unusual irritability under the mildest remedies, it appeared to render it far more amenable to treatment; in fact, it accomplishes all those beneficial results aimed at by using the solutions of caustic potash, introduced on the recommendation of Professor Hebra, without that serious risk of producing excoriation or deeper destruction of tissue, that is liable to follow the careless use of potassa fusa.

Absorbent dusting powders were applied after using the glycerine cerate, when the eczematous patches were extensive and the secretion of serous or seropurulent fluid considerable ;

for the purpose of distributing it equably, a common dredging-box is convenient. American corn-flour, sold in packets at the provision stores, is a cheap and cleanly basis for these dusting powders, being a starch of extra purity, and always in impalpable powder; according to the special requirements of the case, it can be medicated with one-fourth to one-eighth part of oxide of zinc, or mixed with small quantities of carbonate of lead, and, when desirable, prepared with essential oils. The following formula may prove useful:—

R Amyli Zeæ Maidis, ℥iv. ; Oxydi Zinci, ℥j. ; Pulv. Iridis, ℥ss. ;
Olei Amygdalæ Essent., gtt. x. Fiat pulvis.

In concluding this paper, which has exceeded the limits it was designed to occupy, the following recapitulation is submitted:—

1. Eczema is a disease always curable within a reasonable time, and often most amenable to treatment.

2. The hair should never be removed, unless under exceptional circumstances.

3. Sulphur is useless in this disease; sulphur-baths not required, or injurious.

4. Moist applications, lotions, and frequent bathing are all injudicious.

5. Expatriation to distant watering-places quite uncalled for.

6. Constitutional treatment of primary importance; tonics are indicated; and alterative doses of oxymuriate of mercury are of decided service.

7. In certain cases chalybeates are required, and, when gout is present, colchicum.

8. When excessive hyperæsthesia exists, strychnia, given in small repeated quantities, is beneficial.

9. The digestive functions require attention, acidity and imperfect digestion being often complained of.

10. For local treatment, a dilute glycerate of nitrate of mercury is recommended.

11. When there are fissures in the hands and fingers, strong nitric acid is useful.

12. Ointment of red iodide of mercury to excite local action in those cases for which potash solutions are advised by Hebra.

ON THE MORBID ALTERATION OF PIGMENT
CALLED CHLOASMA.—By PROFESSOR HEBRA, of
Vienna.

Ephelis hepatica, Macula hepatica, Leberfleck.

ALIBERT with propriety drew attention to the fact, that certain stains in the skin are called liver-spot, not because they in any way originate from disorder of the liver, but on account of their resemblance to that organ in colour.

Chloasmata may accordingly be represented as yellow or yellowish-brown patches, ranging in size from that of the hand to that of a plate, of various figures, and developed upon different regions of the body, oftenest on the trunk and face, and most rarely on the limbs, more or less circumscribed, and having a defined margin. Their surface is neither covered with scabs, nor is it easily altered in any way by scratching, points which clearly separate them from the disorder bearing the name of pityriasis versicolor,* a yellowish-brown discoloration of the skin, occasioned, as is well known, by the formation of fungi, in which scratching with the finger-nails will remove the uppermost layers of the epidermis in the form of branny scales and membrane-like lamellæ. It is therefore utterly untenable to confound, as many authors do, chloasma with pityriasis versicolor.

Now, if we call all acquired stainings of the skin chloasmata, we must go further and separate them into—I., idiopathic; and II., symptomatic. The idiopathic again are either—*a*, artificial discolorations occasioned by irritations of the skin; *b*, concomitant, that is to say following in the wake, and as a result of other diseases of the skin; and, lastly, *c*, stains arising spontaneously without any known cause.

The symptomatic kind occur as a result of sexual, mostly uterine, disorders (chloasma uterinum, gravidarum, hystericum), partly as extensive stains which sometimes even occupy the whole surface of the skin, as a result of cancerous diseases and other general morbid conditions.

I. IDIOPATHIC, ACQUIRED PIGMENT-STAINS (*chloasma idiopathicum*). *Artificial Stains*.—Discolorations of the epidermis make their appearance as a sequela of any prolonged irritation of

* Formerly Chloasma, liver-spot; see Erasmus Wilson's Atlas, plate A.

the skin, whether there has been merely hyperæmia of the irritated part, or exudation or hæmorrhage; or the staining may appear as the first enduring result of the supposed irritation without being preceded by redness and swelling. Now, as irritations of the skin are either of mechanical (traumatic) origin, of a chemical nature, or due to the action of heat, we may divide discolorations occasioned by such irritants into, α , traumatic; β , toxic; and γ , those arising from heat.

a. Chloasma traumaticum.—It is well known that after long-continued pressure upon any part of the skin, or in consequence of a blow or a squeeze, discoloration of this organ will remain for a considerable time after the alterations in the structures occasioned by the injury, such as redness, swelling, and hæmorrhage, have disappeared. Brown stains, both large and small, point out to us those places where the clothes have pressed upon the skin and fretted it; and it is well known that similar results flow from the friction caused by bodices, shoulder-knots, garters, straps, and by pressure upon the buttocks in certain handicrafts.

Another very potent agent in causing discolorations is frequent and intense scratching with the nails, a common habit in persons afflicted with cutaneous diseases, accompanied by pruritus, one result of which may be a perfect series of stains, peculiarly formed and characteristically arranged, which owe their origin solely to scratching. That this connection exists between the stains and the scratching can be most clearly seen by watching well-marked cases; for instance, those of persons infested with body lice (*pediculi vestimentorum*), in whom, when a number of those creatures have for a long time occasioned itching and scratching, the skin appears changed from brown to black, and most of all in the very spots where the lice are wont to sojourn in the greatest numbers; that is to say, in the region of the neck and sacrum—places where the linen and clothes are gathered a good deal into folds and lie close.

In persons suffering from prurigo, we find the skin of the lower limbs most severely scratched and most deeply stained on the extensor side; on the flexor surface there is a smaller number of both, and in the bends of the joints there are none at all. In slight prurigo there is slight discoloration; in the more severe form a greater amount. A precisely similar relation may be seen between the stains found in persons suffering under eczema and itch, and those parts of the skin which are often and severely scratched.

β . Chloasma toxicum.—We find a second variety of anomaly of colour produced by the action upon the skin of substances

usually applied for the sake of their supposed curative power. The use of a single sinapism will suffice to generate on the skin a pigmentary stain of corresponding size, which may last for life. Such a result is by no means unimportant when the bust or arm of a lady is the seat of the attack; and in other cases it is certainly a superfluous evil if we take into account that the curative power of a sinapism over any disorder is more than doubtful. The stains which vesicants engraft upon the skin are ineradicable; and yet in ophthalmic medicine the practice of applying an interminable succession of small blisters to the forehead, above the eyebrows, and in the region of the mastoid process, is still continued. When we remember that all the complaints for which vesicants, and similar *soi-disant* derivatives, are recommended, may make a favourable ending without recourse being had to such irritants, and that, objectively considered, their course is not affected by them; when we reflect that in a scientific point of view the control of derivatives, applied outwardly, over processes set up in the deeper tissues cannot be established by reasoning and proved; while, on the other hand, such irritants are often certain to leave behind them discolourations which may last for life, and which there are no means of removing, it is our duty to abstain from their use, and, so far as our sphere of action extends, to dissuade others from resorting to such treatment.

γ. *Chloasma caloricum*.—The general opinion is that only increased warmth, and especially that of the sun, is capable of darkening the skin; but unprejudiced observation will soon show, that even a low temperature of the air, when it acts for a long time upon parts of the surface which are unprotected, will produce a dark hue. Not only persons who expose the face a good deal to the direct rays of the sun, but also those who move about much in the open air when it is cold, below freezing point for instance, become tanned.

The characteristic mark of all these varieties of tanning is, not the hue acquired, but the seat of the attack; as they only occur, and then equally diffused, in those parts which are exposed without any defence, while they are absent in neighbouring but protected regions. Thus in cases of this class we find the skin of the whole face, including the ears and the neck, as far as where the neckband of the shirt usually lies, stained of one uniform dark hue; and in like manner the skin of the hands and forearms, to the elbows when the sleeves are rolled up, that of the middle of the chest and pit of the stomach, of the feet and legs as far as the knee in coachmen, sailors, soldiers, road and field labourers, bricklayers, stonemasons, vine-dressers, &c. &c.

It is precisely this localizing of the colouring, and its being bounded by those parts which as a rule are covered, that distinguish it from the varieties occasioned by internal causes; for instance, changes in the sexual organs.

Although it is certain that the influences spoken of can cause increased depth of tint, yet we must not lose sight of the fact that such an occurrence is, in addition to the proximate causes, air and warmth, influenced also by a remote cause, viz. the general state of the patient's health at the time in question. For it is well known, that many persons can expose themselves to the greatest heat of the sun, and yet so far from being visibly tanned, may even retain a distinctly pale complexion. This is the case with people of a chlorotic or tubercular diathesis. Yet these very individuals, if in course of time they throw off their constitutional malady, become sunburnt when exposed to the outward influences of heat.

In common conversation we often hear people say, "I tan very easily," or "I tan very little." The scientific way of putting this would be to say, "Healthy people are easily sunburnt; those out of health only with difficulty, and to a very slight extent."

An analogous case would be that of Pellagra, a disease which certainly springs up under the influence of the heat of the sun, as the proximate cause, but only when defective nutrition of the whole organism interferes in the form of a remote cause.

II. CHLOASMA SYMPTOMATICUM.—Not only in particular regions of the body, but even over the whole expanse of the skin, we find dark-coloured and sometimes very extensive stains associated with different affections of the organism, known as well as forgotten. Out of a great number of these, we select a few which come most frequently before us.

a. *Chloasma uterinum*.—Although modern and even gynaecological writers pay little attention to this complaint, and even, *mirabile dictu*, partly confound these discolorations with pityriasis versicolor, the existence of chloasma uterinum as a peculiar affection, consisting in an anomalous staining of the skin, is none the less certain or less proved by daily observation.

In order to proceed in our description according to anatomical order, we may in the first place remark that in persons of the female sex we meet with brown stains extending over the whole forehead up to the hairy scalp, which are either of one uniform tint, varying from yellow up to dark brown, or marked with scattered lighter spots and stripes. These latter,

the stripes, do not always run horizontally; they may lie aslant or diagonally, or they may run irregularly between one frontal eminence and another. In other cases the dark colouring is restricted to two symmetrical spots, between which the skin remains normally coloured. The stain often follows the arch of the eyebrow; at other times the skin of the upper or under eyelid is tinged brown, and the countenance looks like that of a person suffering from sickness. Sometimes a brown mark of this kind runs for a certain distance outwards from the external angle of the eye, as though it were a continuation of the fissure of the eyelids. In the same way we find in other persons these brown stains on the skin of the cheek, and on the upper lip in the form of a moustache, or on the under lip in the sulcus mentalis. This does not imply that other parts of the face, such as the nose, cheeks, &c., remain free from stains. On the other hand, the skin of the concha of the ear, of the neck, and of the under-part of the chin always escape, and make themselves conspicuous by their light tint.

As to the rest of the body, the areola of the nipple, and the linea alba are especially parts in which such stains and stripes are wont to appear.

That these stains are all called forth by certain physiological and pathological changes in the sexual organs of the female, is easily deduced from the fact that they never appear before puberty; that in many persons they only occur before or during menstruation, while in others they accompany pregnancy; that often in such persons manifest pathological conditions of the internal sexual female organs, such as the uterus, Fallopian tubes and ovaries, for instance, profuse or scanty menstruation, ovarian tumours, fibrous growths in the uterus, infarction, polypi, cancers, &c., may be clearly traced; and, finally, that, with the removal of these conditions, the stains either diminish in intensity or entirely disappear. But it must be admitted that we often see the stains of *chloasma uterinum* on the face in persons of the female sex who neither menstruate, are pregnant, nor have any internal disorder of the genital organs to show. In such cases the same rule holds good as has long been current with regard to the countless diseases which have attracted notice under the name of hysteria (*sine materiâ*); for, if it suit some persons to make hemicrania, neuralgia of all kinds, constipation and periodical diarrhoea, cardialgia, globus hystericus, and clavus dependent upon some uterine affection, without determining this affection more closely, we can, supported by analogy and such testimony as this, with equal right refer the discolorations spoken of to a similar source. Those who will only allow pregnancy

or some demonstrable change in the sexual organs to be put forward as adequate ætiological grounds for discolorations of this kind, are just as far from being able to prove the connection between the two facts, as those who content themselves with viewing the so-called hysteria as a cause of the discoloration.

It is necessary to call attention to the fact that all these chloasmata of the face, nipple, and lower part of the body disappear with wasting of the uterus and the physiological involution of the genital functions; so that, after the climacteric period, we seek in vain for chloasmata, although at an earlier period they were abundantly present in such persons.

β. *Chloasma cachecticorum*.—Under this head we propose to consider the dark tinting of the outward covering of the body, which, mostly in a very diffused form, results from several varieties of general disorder; for instance, in malarious disorders, which, without exception, engender a yellow or dark chestnut-brown hue. These discolorations outlast the intermitting fever, and exist for years after the agueish attacks have ceased to return.

These stainings become peculiarly intense when corresponding external influences, such as the heat of the sun, or sharp fresh air, concur in bringing them on. We accordingly find them strongly developed in railway labourers, who work through the summer months badly fed and badly housed; harbouring, perhaps, in addition, a great number of body lice. Under these influences, intermittent fever, bodily privations, bad food and lodging, exposure to the open air, and intense scratching from itch and body lice, so dark a colour is developed that it is really only distinguishable from that of a mulatto by its being less uniform, for in chloasmata the colour is paler at the folds and joints.

The cancerous cachexia acts in a similar manner, whether the new growth is seated in the stomach, the liver, or the kidneys, so that no conclusion can be drawn from the site of the stains as to where the cancer has taken up its abode. In any case the rarity of the occurrence of new growth in the supra-renal capsules is far less frequently the cause of one peculiar kind of staining, the *Morbus Addisonii*, than would justify us in connecting cancer of the liver with discoloration of the skin. And although we are willing to acknowledge that Addison was the first to call attention to diseases of the supra-renal capsules, and the change of colour which accompanies them, we still think it cannot be admitted that the diagnosis of Addison's disease can be upheld, because no one can positively predicate a disease of these organs, as

existing in a living being who may happen to suffer from bronzing of the skin. Addison himself, as is, indeed, proved by the preparations relating to this subject, preserved in Guy's Hospital, has with great candour avowed that he has seen dark-coloured stains appear without disease of the capsules, and *vice versâ*, that he has found the latter diseased in post-mortem examinations when there was no discoloration visible.

Therapeutics.—If we now at this stage wish to add a few final words upon the treatment of these anomalous discolorations, it will be necessary to indicate all those means which are of avail in artificially removing the epidermis, and loosening it from its maternal soil the papillary bodies. As, however, some of these produce on the newly-formed scarf-skin a darker hue than was visible on the old and now destroyed surface, they are for that reason little suited for such a purpose. To this class belong tincture of cantharides, vesicants, and sinapisms. On the other hand, we possess in iodine, corrosive sublimate, white precipitate, magistery [sub-nitrate] of bismuth, means which are capable of destroying the darkened epidermis, and of checking the formation of the dark tint in the new pellicle.

The first of these, iodine, we employ in the form of tincture, applying it by means of a brush, three times a day for four consecutive days. After the browned epidermis has fallen off, the new scarf-skin appears of a normal hue. Sublimate is most usefully employed in the form of solution, five grains to an ounce of water, used as a compress; under its influence the epidermis is raised up in the form of a bleb, and thrown off in brown scales. White precipitate and magistery of bismuth, in the form of ointment, a drachm of each to an ounce of hog's lard, yield equally good service, but only after being used for several weeks.

Appendix.—Having sketched in a few words the dark discolorations of the epidermis, we must now mention one morbid alteration which appears accompanied by an exactly opposite change of colour, viz. with white stains, arising from deficiency of pigment. Alibert calls it *éphélide scorbutique*, and portrays it in his twenty-seventh plate. In portraits of Diseases of the Skin, by Erasmus Wilson, there is in Plate II. a delineation of this disease, connected with the names *Melanopathia* and *Leucopathia*. The peculiarity of this anomalous colouring consists in this, that, in addition to the two-fold colouring, the white spots are always bordered by a peculiarly dark stripe, and that a constant increase is taking place in the size of the light parts at the expense of the dark, so that in

time the skin will assume a perfectly white colour. Whether this malady is to be understood as an idiopathic or symptomatic anomaly of colouring, whether it is to be ranked among cutaneous diseases generated by excess (hypertrophy) or want of pigment (atrophy) I do not know. For this reason I now append it here, and I leave it to a future period and to honoured hands to rank this complaint in its proper place among the different anomalies of colouring.

ON PSORIASIS AND LUPUS : with remarks on mixed forms of Skin Disease : a Clinical Lecture, by JONATHAN HUTCHINSON, Surgeon to the London Hospital, and to the London Hospital for Skin Diseases.

WHOEVER has studied the mutual relations of the different diseases of the skin must have been frequently struck by the fact, that there are some which partake of the characters of two or more. I have said partake of the characters ; let me say, rather, partake of the nature, for that is the more correct expression. The mixture is real, and results from the coexistence of different causes. Just as you cannot, with scientific accuracy, designate the son of a French father and an English mother either a Frenchman or an Englishman, so there are many skin diseases of mixed breed to which no single family name is applicable. We are naturally greedy after names ; they are so convenient, and when once understood, help us so vastly to the comprehension and orderly arrangement of our subject ; and from this there often results an impatience in the use of designations which is injurious to real progress. Instead of being content, nay, proud to remain the interpreters of nature, we try to enslave her, and to make her go through her evolutions in the fetters of our pseudo-science. But the attempt fails.

“ You cannot tell me whether that eruption is a dry eczema or a diffuse psoriasis ; and just now you seemed equally puzzled between lichen and eczema. It is clear that the fault lies with your stupidity or want of familiarity with our subject.”

“ No, my friend and pupil, not wholly so. The eruption does really partake of the characters of two different types of disease, and its only correct name would be one which should imply a recognition of its double origin and real nature as

a compound result." In such a dilemma there are two ways out of our difficulty. We may append a descriptive adjective to the name of the disease which seems most nearly appropriate, or we may invent a wholly new designation. Thus, when psoriasis passes into eczema, and when the crust (in part epidermic and in part purulent) forms itself in papery layers, you may, with some authors, call the disease "pityriasis rubra." Such a name has, however, the inconvenience that it detaches the disease from its near allies and adds much to the student's difficulties. A better method is to use an adjective indicating its resemblance to some other disease, an instance of which we have in the common name eczema impetiginoides. This plan, however, serves rather to imply similarity in appearance, than to indicate a sharing in nature, and is therefore frequently, if not almost always, incorrect. Another objection is that the adjectives thus coined are often long, ugly, and unpronounceable.

You are aware, gentlemen, that during the present course of lectures, I have constantly insisted on the importance of classifying the causes of skin disease, and the uselessness of attempting to classify their results. If we do the latter, it leads inevitably to the juxtaposition of maladies which differ *in toto* as to cause, as to treatment, and as to progress. Our classes and genera, so constructed, are utterly unnatural. There is no escape from this, since local conditions apparently similar may be produced by very different causes. I assert, then, that the only grouping of skin diseases which can be of any use in advancing science, or in aiding the student, must be founded on essential similarity, or in other words, on relationship as to cause. It seems to me, also, that we need a large reform, not only in the classification, but in the mere nomenclature of these diseases. We do not want any new names—not even any new adjectives, nor will it be necessary to change the usage of many of our more common designations. With the rapidly increasing study of dermatology, most of our common names are acquiring fairly definite, and well understood meanings. When such is the case, by all means let us keep to them. Many of them, thanks to our classical forefathers, are euphonious words, which it is a pleasure to employ. Our aim must be to give to these names clear definitions, and then, when we thoroughly understand each other as to what each word means, our next and more difficult task will be to combine them dexterously when we wish to designate the mixed diseases to which I have just adverted.

Now it seems to me that when an eruption on the skin partakes of the characters of two recognized diseases known

by different names, the most convenient plan is to use the names of both parents. Such a custom would at once indicate to any one our opinion as to the nature and cause of the malady. When a patch of inflamed skin exudes a thin sticky secretion, shows red abrasions, and has a thin flaky scale, every one would apply the term "eczema." But on the same surface, or at its margin, there may be abundant small red pimples, solid and firm, and these are the essential constituents of lichen. To call the disease "lichenoid eczema" is to imply a disease essentially eczema but looking like lichen, which it is not, but real lichen and real eczema occurring together. "Lichen-eczema" would, I think, be a more correct name; and on the same pattern, and for the same reasons, I would propose to use such terms as Eczema-psoriasis, Lepra-psoriasis, Lupus-psoriasis, Lichen-psoriasis, Prurigo-pemphigus, Porrigo-eczema, and others. I have already given you definitions of all these single words, and when they are combined we shall understand not a mixture of appearances, but a mixture, as far as we can ascertain, of the two maladies concerned. In each instance the disease is a modified result, different from either one alone, or else it exhibits two definite results coexisting.

An objection may be raised to this method of designation that it affords facilities for vagueness and carelessness in diagnosis. To this I reply that it is absolutely necessary from the nature of the subject, and that those who do not use it must employ adjectives or some other equivalent. In many instances it would be quite contrary to fact to use but one name. To any criticisms which should hint that the use of two nouns conjoined is un-English, we have no time to listen. If it be more accurate and more useful than any other, the sooner it becomes English the better.

My reason for making these remarks on the present occasion is, that I wish to ask your attention to a variety of disease, not, I think, hitherto described, and which illustrates their application in a remarkable manner. These cases are connecting links between psoriasis and lupus. They partake of the characters of both. In order to understand this assertion, and to test its accuracy, we must clearly define the meaning of these two words.

Under the term psoriasis we recognize a disease attended by the production of patches of inflamed skin covered by crusts of epidermic scales. The eruption comes out equally on the two halves of the body, and shows a preference for certain locations. Its subjects are usually in good general health, and are more frequently young than advanced in years.

The disease is under the influence of arsenical treatment, but is very prone to relapse.

Under the term "lupus" we recognize an inflammation of the skin attended by deposit of new material in the deeper layers, which shows itself first as smooth, glossy, brown, semi-transparent tubercles or patches; which lasts for a long time; and which, whether it ulcerate or not, destroys the tissues which it has invaded, and leaves a scar. Lupus is generally restricted to one patch, and is frequently caused by some local irritation.

Now, the cases to which I ask your attention are instances of an eruption of lupus patches scattered over the surface of the limbs and trunk symmetrically, just as those of psoriasis are. That the patches resemble psoriasis not only in their arrangement and in their abundance, but also somewhat in their general appearance, I may prove by mentioning the fact, that almost all my friends who saw the patients suggested the diagnosis of that disease. That most of the patches were really lupus and not psoriasis was proved by the fact that they were attended by considerable deposit in the deep layers of the skin; and that, wherever they had undergone cure, a cicatrix was left. In several of them superficial ulceration occurred; but in three, in which the characters of psoriasis were the most closely approached, there was no tendency to ulceration whatever, but yet cicatrices resulted. In one of the latter I excised a portion from a patch, and found the corium infiltrated with the semi-transparent jelly-like deposit characteristic of lupus.

In further confirmation of the near relationship which obtains between some forms of lupus and some of psoriasis, let us note that both occur in patients in good health, and that both are influenced by the use of arsenic. The more strictly local forms of lupus, especially that which attacks the nose, are often connected more or less remotely with the tuberculous diathesis. In addition to the four cases which I am about to relate, I might mention many others more or less similar, in which lupus occurred in separate patches with tolerable symmetry of arrangement. I prefer, however, to confine our attention to the most definite examples only. My attention was first drawn to this subject by the case of a woman who was admitted under my care into the London Hospital some years ago. The following are the particulars as to her eruption which I wrote out at the time:—

CASE I.—Mrs. Lee, aged 42, married, but never had a family, of brown complexion, with blue sclerotics. "Never had a day's illness in her life except ague."

She never had any skin disease until about ten years ago, when she had a

severe scald of the right arm. The scald was on a Good Friday. It healed in a week or two. Towards the end of May a rash of red spots came out on the scalded arm then just healed. It lasted two or three months, and affected only the scalded arm ; about a year after it came out again. She had it nearly every year more or less, but until four years ago it never affected other parts than the scalded arm.

During the last three years she has had several outbreaks, in which other parts, *i. e.* the face, the feet, and the opposite arm, have been affected. In all these, however, it has been most severe on the scalded arm. On careful observation there are very superficial scars over a considerable portion of the right arm and fore-arm ; these she says were left by the scald. She never had the eruption out so severely as it now is. The present outbreak began about five weeks ago.

Description of the eruption.—She has patches on the face, on both arms, on the body (few), and on the legs and feet. The tip of the nose and both alæ are symmetrically involved. The skin is red, tense, and shiny, with layers of cuticle peeling off. It looks exceedingly like lupus non-exedens.

In the middle of the right cheek and on the upper lip are other scaly patches, much congested and of peculiar yellow-brown aspect, also closely resembling this form of lupus. The idea that such is their character is further borne out by observing very superficial white cicatrices on the cheek and upper lip which have been left by former eruptions. These thin cicatrices are also seen on the forehead. Around the mouth and on the left eyebrow, however, are patches which resemble rather eczema circumscriptum.

On the extremities the eruption prefers the backs of the limbs. There are patches over the backs of the elbows, and none in front over both patellæ, and none in either popliteal region.

The right arm is affected much more severely than the other. The patches are large and numerous, some as large as the palm of the hand, and others as small as split peas. Their appearance is such that my first diagnosis was “inflamed psoriasis.”

A suggestion made to me by my friend Dr. Hitzig, and more careful inspection of the patches, subsequently made me, however, doubt the correctness or rather the precision of this opinion. The patches are deeply coloured, of brown or purplish-red, and show large scales of cuticle peeling off. On the larger ones there is no heaping up of epidermic scales, but the small ones have tolerably thick dry crusts. The crusts are yellow not silvery, and do not easily break up into scales. But the chief suspicious feature about the larger patches is that they are depressed and contracted. The skin beneath them seems thinned, and drags upon its edges, just as is usually seen in lupus non-exedens. Indeed, there are some patches which were they solitary or nearly so, instead of being thickly scattered over large surfaces, and had they existed for five years instead of as many weeks, I should never hesitate to consider lupus. The smaller ones do not resemble lupus at all.

On both hands the fingers are extremely affected. The disease prefers their extremities, and is characterized by thick peeling crusts of epidermis and deep psoriasis, the nails being rugged and broken. A few,—very few and very small,—patches where the cuticle is peeling are to be found in the palms.

On the feet at their sides are patches similar to those on other parts ; the cuticle of the soles is thickened and a little broken at places, but, as compared with other regions, both palms and soles are almost exempt.

The aspect of the eruption did not in the least to my mind suggest a syphilitic history, nor did it to Dr. Hitzig. I thought it safe, however, to make inquiry, and was assured by the patient that such was not the case.

The case seems to me to present a connecting link between psoriasis and superficial lupus. We must accept as the pathognomonic feature of the latter that it destroys the tissues of the skin, and inevitably leaves a thin scar, whilst the former consists in the increased production of epidermic scales, and leaves the structure of the skin unharmed. In the history of repeated almost annual recurrences in its affecting extreme surfaces on different parts of the body and limbs, and in its running a rapid course, the disease resembles psoriasis. Its smaller patches also present, on the most careful inspection, no features distinguished from that eruption. The parts affected, backs of arms and fronts of knees, are those which psoriasis (non-syphilitic) prefers. On the other hand, the features of many of the larger patches are those of lupus ; in some places thin scars have been left by former outbreaks, and I suspect that many more will result from the present one.

The above notes were written at the time. I had no opportunity for following up the case, as the patient left the hospital after a few weeks' treatment, and did not return.

CASE II.—A second case came under our notice in the person of a boy aged six, who was in the children's ward of the London Hospital in the latter part of 1866. This boy had patches scattered over his face, body, and limbs, which were arranged symmetrically, and which preferred the localities usually affected by psoriasis. When I say arranged symmetrically, it must not be understood that the patches on the opposite limbs corresponded in size ; for they had spread much more widely in some parts than others. His right fore-arm was almost covered by them ; and when he was admitted, it was supposed that he had been scalded on this part, the whole being superficially ulcerated. All the patches showed a tendency to spread at the margin, and heal in the centre (serpiginous). Many of them were, at first sight, very like those of psoriasis, but on close inspection you would note that there was but little epidermic desquamation, and that the tissues of the skin were infiltrated by semi-transparent, jelly-like effusion. In all parts, where the patches were in process of cure, scars more or less deep remained ; in some the scars were very thin, and needed to be carefully looked for. The disease had existed for long, but he could not tell us how long. The boy was of dark complexion ; and, had it not been for his eruption, one would have said that he was in good health. We gave him arsenic internally, and used caustics (the actual cautery and carbolic acid) locally. After three months' treatment, he left the hospital with many of the patches quite healed, and all of them in a greatly improved condition.

CASE III.—My third case was a little girl, æt. 9½, in the hospital at the same time as the other, and who still remains with us. It is an exceedingly

interesting one, and the condition of the patches was so definite that I have had a finished portrait in colours taken by Mr. Burgess, which will probably in due time be published. This girl is the subject of disease of the bodies of the vertebræ, which may by some be considered to denote a "strumous" diathesis. She is of dark complexion, florid ; and until the abscess in connection with her spine gave way, she appeared to be in tolerable health. Her eruption of lupus consists in patches varying in size from a sixpence to a half-crown, scattered over her limbs, face, and trunk, and arranged with very tolerable symmetry. All the patches are alike, and none of them are ulcerated. All are raised, glossy, of a semi-transparent appearance, and brownish tint. There is a thin epidermic desquamation over them, but nothing worth calling a crust. Some have already healed, and have left superficial scars ; others are healing in the centre, but spreading at their edges. The whole of her left ear is involved in a patch, and from this I cut out a small portion for microscopic examination. The deposit of jelly-like material was an eighth of an inch in depth, was very abruptly defined, and involved, of course, all the tissues of the skin. It was covered on the surface by a thin epidermic layer. In this case, as in the preceding, we have used the actual cautery to the patches, and administered arsenic internally. Most of the patches are now nearly cicatrized.

My fourth case is at present under care at the Hospital for Diseases of the Skin, and its particulars are as follow :—

CASE IV.—SAMUEL COVEY, aged 15, was admitted Feb. 1, with an eruption covering his face and forehead in patches, which at first sight looked like psoriasis. They had, however, very few scales on them, and at their margins were considerably thickened, and of the dull reddish-brown tint of lupus. All the patches showed a tendency to heal in the centre. There was no very definite scar to be detected, but yet the skin was not normally soft. The patches almost covered his forehead, and passed also into the borders of his scalp. Over the whole of the scalp itself the condition was that of ordinary psoriasis and accumulations of scales at the roots of the hairs. Although some of the patches on the forehead were large, most of those on his face were from the size of a sixpence to that of a shilling. They were abruptly defined, raised at the edge, and depressed at the centre. His body and arms were spotted over with similar patches, few of them being larger than a sixpence, and none of them showing a thick scaly crust. They were most abundant in the usual psoriasis positions (backs of arms and elbows). He had no patches on his lips, nor on his nose. The eruption caused him no inconvenience. "If he did not see it, he would not know it was there." He was in good health ; rather florid, having blue-grey eyes and dark brown hair. He said that the rash had first appeared five years before, and that it had never entirely disappeared since.

This case comes nearer to psoriasis than the others which I narrated. There can be no doubt that some of his patches are psoriasis only, yet I have no doubt that beneath many of them in the deep layers of the skin the changes are taking

place which will result in destruction of tissue, and which are characteristic of lupus.

Those who have followed me through the narrative of these cases, and especially those who have seen the patients themselves, will, I think, be prepared to admit that the most appropriate name is one which should combine the words psoriasis and lupus. In all probability the causes of these two maladies are present in combination ; hence the result is complicated, and hence the necessity for a mixed plan of treatment.

You will observe that in no one of these cases did the lupus ulcerate deeply, and in one only was the nose affected. The common forms of lupus very usually attack the nose ; common psoriasis scarcely ever.

If you think that I have proved my point, and that there are rare cases which in a very positive manner partake of the nature both of psoriasis and lupus, then I will ask you to extend the knowledge thus acquired a little more widely, and to believe by inference that in not a few of the cases of lupus in which the patients appear to be in good health, the state of constitution which induces the disease (and which as yet we are unable to define) is closely similar to that from which psoriasis results. The greater the tendency to deep ulceration, and the more definite the derangement of the general health in any case of lupus, the more does it depart from the type of psoriasis, and the less would be the benefit to be expected from arsenic. On the other hand, not a few of our cases of inveterate psoriasis verge towards lupus, and are curable with almost as much difficulty. It is true that these do not disorganize the deep parts of the skin, nor leave visible cicatrices (if they did I should call them lupus) ; but it may still be suspected that during their inflammatory stage deposit in the corium was present, and that after their disappearance that structure is not left in a perfectly healthy state. The question as to the production of a cicatrix is after all one of degree, and there may be slight changes in this direction which the unaided eye cannot discover.

REVIEWS.

On Diseases of the Skin, including the Exanthemata. By
FERDINAND HEBRA, M.D. Translated and edited by C.
HILTON FAGGE, M.D. 1866.

THE New Sydenham Society has done good service to the medical profession by undertaking the translation and publication of Professor Hebra's excellent work, the first volume of which is just issued with the promise that the second volume completing the book shall be ready during the present year. In several respects the English edition is greatly superior to the original; the latter, as our readers are probably aware, appeared in Virchow's "*Handbuch der speciellen Pathologie und Therapie*," and was the united labour of the author and several colleagues; in the English edition Hebra has himself written those parts which were previously the production of the pen of others, and appears before us as the author of the entire work. "Moreover," he observes, "there are in the original several errors by which the meaning is perverted; all these have been corrected in the present volume. Consequently, many little changes will be found which are to be regarded as improvements. In fact, in all these points the English translation is more correct than the German edition of my work." In its present corrected and complete form, Hebra presents the book to British readers with the remark that "English literature is already by no means poor in treatises upon cutaneous affections; for although, during the last century, this branch of medical science was cultivated with zeal both in Germany and France, it was England, the country of Willan and Bateman, which took the largest share in what may be termed the Reformation of Dermatology."

We are quite sensible of the compliment paid to British cutaneous medicine by our German colleague; and we venture to say in reply that, although English literature may abound in treatises on cutaneous affections, its representatives at home

are far from being satisfied with the *status* of the subject; that we accept with satisfaction the co-operation of the author towards its perfection; that we thank him most warmly and heartily for the new thoughts and suggestions which he raises to our mind for consideration and reflection; and that we hope to be able to prove that the workers of to-day are not unworthy descendants of the distinguished Reformers of half a century ago.

We cannot pass without notice the intelligence and industry which the translator has brought to the performance of his work. With reference to Dr. Hilton Fagge's translation, says the author, "I will only say that I have found reason to express the fullest confidence in his knowledge of the subject, as well as in the zeal with which he has executed the task set before him." And, in proof of the fidelity evinced in the discharge of his duty, we are informed that "every sheet of the translation has been read over by Professor Hebra, and every passage in which I felt any doubt as to the faithfulness of the translation, or as to the sense of the original, was underlined by me, and has been accepted by him, or corrected so as to convey the right meaning."

These preliminaries over, with regard to the birth, the parentage, and the foster charge of our new friend, we open its pages to make acquaintance with the idea and plan of the work, and also with its contents. On its title-page, the book is announced as a treatise "on Diseases of the Skin, including the Exanthemata," but why including the Exanthemata? Why apologize for the Exanthemata? The Exanthemata are clearly as much diseases of the skin as urticaria, or erythema, or hyperidrosis. When Hebra styled his work "Acute Exanthemata and Diseases of the Skin," his object, as we have always understood, was simply to draw particular attention to a subject which to himself was especially attractive, and to which he had devoted much labour and consideration; and when a proposition was made to him to permit the translation of his book, *minus* the Exanthemata, he very properly rejected the proposal. And if we turn to the text, we find nothing to warrant the distinction which is made on the title-page. Exudationes cutaneæ, Hebra's fourth class, are divided into two groups, *acute* and *contagious*, and *chronic* and *non-contagious*; the former being composed of the Exanthemata, namely, measles, scarlatina, variola, and vaccinia. No hint is given or intended of any disseverment of the subject by the separation from the rest of any group of diseases; on the contrary, the very essence of Hebra's idea of diseases of the skin is the identity of their pathology with that

of the rest of the economy, an identity with which the exanthemata must necessarily conform.

The first chapter of the volume is devoted to general pathology and symptomatology; the second to the general considerations belonging to diagnosis, etiology, treatment and classification; and then follows the description of three entire classes of diseases, and part of the fourth. Diseases of the skin, according to the author, and with his opinion we entirely concur, are in nowise different from the diseases of the rest of the economy. Thus, there are some "which are caused by hyperæmia, anæmia, exudation, and hæmorrhage, and we also meet with neuroses of the skin, and find it presenting new growths, or affected by hypertrophy and atrophy." To which may be added, ulceration, parasitic growths, and anomalies of the cutaneous glands and of their secretions. The primary symptoms or forms of efflorescence or eruption, comprising the macule or spot, the papule, the tubercle, the wheal, the tumour, the vesicle, the bleb, and the pustule, are described with much care and with their various modifications; as also, are the secondary forms of efflorescence, and the distribution of eruptions on the skin. The secondary forms of efflorescence are, the excoriation, the cutaneous ulcer, the fissure, the scale, the crust, the lamellated crust, and the scar.

In the *diagnosis* of cutaneous disease, "no other assistance is required than a knowledge of the objective symptoms which are visible on the surface of the body in each particular case. We do not attach any value whatever, either to the history or to the subjective phenomena in investigating a cutaneous affection; for we ought to be guided in this matter only by those symptoms which are appreciable by the sight, the touch, or (sometimes) by the smell. These afford certain infallible grounds for the establishment of a diagnosis; for they have their origin in the malady itself. They are, so to speak, the alphabet, of which the letters are traced on the skin; and our task is but that of deciphering the writing. To accomplish this, it is peculiarly important to have a method in the investigation of every skin affection, and not to neglect certain rules in examining the cutaneous surface when diseased."

In the prosecution of our diagnosis the author remarks "that the whole body should be looked at, even in cases in which the malady is nominally or really confined to one particular spot; for it frequently happens that the disease assumes quite a different aspect when regard is paid to the appearances presented by every part of the surface, from what it would

have if those spots only were examined which were indicated by the patient as its seat." He also urges the necessity of full daylight, of a temperate atmosphere, and of a normal state of the skin; as opposed to artificial light, too high or too low a temperature, and the operation of the warm or the cold bath. "Due regard being paid to these considerations, the examination of the case may be commenced," our object being "to keep to the *general appearance* of the disease, not allowing ourselves to be beguiled by any special symptom, however striking it may be." The chief points to be inquired into are the character of the *surface*; the *colour* and pigmentation of the skin; the degree of *swelling*, thickening, or infiltration; the presence or absence of traces of *scratching*; the *form*, the *number*, the *arrangement*, and the position of the primary and secondary signs; the existing pathological process; the probable nature of the irritant; the age, sex, and occupation of the patient; his mode of life; and his habits as to food, lodging, and clothing. "Our object must, in fact, be, to take a broad view of the case as a whole."

The *etiology* of cutaneous diseases presents us with two kinds of causes, internal or symptomatic, and external or local and idiopathic. Of the affections resulting from the former are the blood diseases, for example, the exanthemata, the spots of typhus and cholera, and the eruptions of syphilis, scorbutus, scrofulosis, and carcinoma. Deranged visceral function is manifested on the skin in many ways in association with the alimentary canal, the uterine organs, the liver, spleen, kidneys, and even the heart, great blood-vessels, and lungs; then there are certain changes associated with the physiological functions of menstruation, pregnancy, and dentition. Age, occupation, mode of life, food, lodging, and climate, are other conditions that influence constitutional disturbances; as also do the different forms of contagion, whether actual or imponderable. Hereditary transmission has a similar source, and may operate not only by the conveyance of morbid material to the offspring but also by the creation of a habit or natural resemblance. Moreover, we perceive the agency of the nervous system in certain morbid sensations, in hyperæsthesia and anæsthesia, in perverted innervation; and occasionally that of the brain, in mental disorders. "Much more potent in the generation of diseases of the skin than the internal causes that have their seat in the organism itself, are those agencies which are external to the body, and which affect the skin directly; thus are produced the so-called *idiopathic dermatoses*." Among the external causes are to be enumerated: climate, clothing, occupation, mode of life, atmospheric conditions, unwholesome

handicraft, pressure, friction, contusion, scratching, neglect of cleanliness, too frequent or too energetic washing and bathing, irritants used for medical purposes, such as rubefacients, epispastics, the moxa, &c., and lastly epiphyta, dermatozoa, and epizoa.

It is not to be concealed that Hebra has a powerful leaning towards local causes and local treatment; and in this respect the genius of our author is somewhat at variance with that of British medicine. It may be urged that while we attach too much importance to internal or constitutional causes, Hebra and his school think too little of their value; and that both would be gainers by a blending of opinion. In our search after internal causes, it may be possible that we see more and more deeply into the economy than our opponents; while we may be less able to appreciate the minuter shades of local irritation; in fact, that while we gaze on one side of the shield, our opposite neighbours are regarding the other; and common sense is taking her seat demurely between the two groups. We are certainly at a loss to comprehend how cleanliness, even carried beyond ordinary bounds, can be a cause of disease of the skin, and should regret very much to see the doctrine gaining ground. What would the devotees of the Turkish Bath say to such a proposition? and what is Hebra's own experience of the bath in which he keeps his patients immersed for several weeks. As British men, we are ready to tolerate every variety of opinion; but we protect our soap and water as we would our homes and hearths. Does the monthly nurse find soap and water injurious to the delicate skin of our little ones? We think not, and we believe that the soap confers upon the skin a healthy tone; that it is stimulant and tonic, and makes up for the habit of clothing the skin rendered necessary by the state of our climate. We should be more inclined to accuse the swaddling of the skin of young infants in irritating woollen garments than the wholesome application of water and soap.

In the author's denunciation of irritants applied to the skin for medical purposes, we are not much interested; the practice is rare amongst ourselves, and rarely abused; and we, therefore, read with some wonder: "for my own part, I think that the supposed, but not proven good effects of the use of the epispastics are far outweighed by the demonstrably evil results of their application to the skin." Of the epiphyta, the author observes, they "invariably belong to the class of fungi," and consist of minute bodies, termed spores; "they are either naked or enclosed in special organs (sporangium), and they are seated on a common base." The following eight species have up to this time been discovered, namely: *tricho-*

phyton tonsurans, Malmsten; *mycoderma plicæ Polonicæ*, Günsburg; and *trichophyton sporuloides*, Walther; *microsporon Audouini*, Gruby; *microsporon mentagrophytes*, Bazin; *microsporon furfur*, Eichsted; *achorion Schoenleinii*; *onychomycosis*, Virchow, and *aspergillus*, Meissner; and the *oidium albicans* of the nipple, Küchenmeister.

Of the existing *treatment* of cutaneous diseases, Hebra draws a more gloomy picture than we think to be justified. He considers that only of late years have exact and accurate investigations been pursued, and such therapeutical experiments made as shall conduct us to a true knowledge of the application of remedies. In this inquiry, he believes that several conditions are necessary; namely, precise information as to the natural course of a given disease, a knowledge of the full effects of the remedy on a healthy skin, and a more extended familiarity with the pathological chemistry of the morbid processes. In the absence of this kind of information, and of a rational basis of treatment, we have no expedient left but empiricism, and to this alone at the present time are we indebted for the greater part of our success. He next proceeds to combat certain "deeply rooted prejudices" against the use of local remedies, and to declare his entire want of confidence in blood-purifiers, laxatives and drastics, antimonials, decoctions of woods or vegetable juices.

Some years since we drew attention to the fact that it is quite a mistake to suppose that the action of remedies applied to the diseased or healthy skin is necessarily merely topical and not general; for we need but call to mind the contagia of smallpox, syphilis, hydrophobia, and the poisons of serpents, and of the dissecting-room, which are generally introduced through the skin, to prove that it is an organ which absorbs very readily many forms of virus. And that it is equally adapted to absorb medicinal agents also, and to admit them into the circulation, even while the epidermis is intact, can be easily shown during the external use of tar, of iodine, or of the mercurial preparations.

Now what can be demonstrated in the case of certain remedies by chemical reactions, ought surely not to be denied *a priori* in regard to others; and therefore we maintain the exact contrary of the principle we have alluded to, and assert that, with the exception of caustics, all remedies which are brought into prolonged contact with the skin are absorbed by it, and taken up into the fluids of the body.

Hence we have no fear in applying topical remedies, of driving in cutaneous diseases, or of producing any other ill effects, for which the practitioners of the old school had various expressions. Our apprehension is, rather, of a too violent action upon the organism in general, especially in the case of those drugs which are liable to produce derangements of the vegetative processes. Nor have we any dread of curing skin affections too

quickly. On the contrary, it is the object of our warmest endeavours to find means of terminating these diseases as speedily as possible. Were we only in the possession of remedies which produced cures thus rapidly, we should have no anxiety with regard to the appearance from this cause of metastases or of any other consecutive diseases.

Arsenic has been found by Hebra to be an useful internal remedy, and he has also derived good results from mercury, iodine, iron, cod-liver oil, and bitters, with vegetable and mineral acids. But it is with an evident feeling of relief that the author disposes of internal remedies, and spreads forth his store of topical applications. Here we find *baths*, warm, cold, douche, and vapour; simple and compounded with sulphur, potash, soap, salt, and the bichloride of mercury, ranging in temperature from 66° to 100°, and applied with a duration of several minutes to several days. Then he employs *emollient frictions* with oil or fat, the oils of almonds, olives, linseed, or the liver of the cod; lard, suet, glycerine, spermaceti; or he unites with the fats, mercury, zinc, lead, copper, iodine, sulphur, &c., or applies the metallic salts above enumerated, when soluble in water or alcohol, as lotions.

Our sheet-anchor, which we invariably employ when we wish to effect either the rapid separation of the horny layer of the epidermis, or the removal of exudations infiltrating the cutis, or poured out beneath the cuticle, is always the soft or potash soap. This we apply either alone, as in prurigo, eczema, psoriasis, ichthyosis, pityriasis, herpes tonsurans, favus, lupus, &c., or we blend it with other medicinal agents, such as, for example, sulphur in case of scabies, tar in cases of eczema, &c.

Moreover, an important part of our therapeutical resources consists in the empyreumatic oils, which result from the dry distillation of certain kinds of wood. Thus we make use of the tar which comes from the beech, *oleum empyreumaticum fagi*, of the *oleum cadinum*, which is derived from the *juniperus oxycedrus*, and of the *oleum rusci*, which is obtained by distillation from the wood of the birch, *betula alba*, and which possesses the smell of Russia leather. The action of these is nearly identical; they differ only in their consistence and in their smell.

For the removal from the skin of exudations, new growths, tumours, and the like, caustics are employed. The mineral acids can be applied in comparatively few cases; not only is their action inconstant, and therefore unreliable, but better effects are obtained by other caustics, and without the disfiguring scars which the former are apt to leave behind, and similar objections may be raised against the chlorides of antimony and zinc.

Foremost amongst a better class is the nitrate of silver, either

solid or in solution with an equal part of water. "To this substance we attach a great value, because every kind of new growth can be destroyed by it, without causing any further injury to the patient, and because any one, however unpractised, can apply it, without having any special experience in its use." Next to the nitrate of silver stands the potassa fusa, which may be used either in stick, or solution of one part to two of water. It produces a more extensive loss of substance than the lunar caustic, and one not so easily controlled, and it is also apt to give rise to protuberant cicatrices.

Next follow the caustic pastes: the Vienna paste, or potassa cum calce; Canquoin's paste, of chloride of zinc and flour; Llandolfi's paste, of the chloride of bromine, antimony, zinc, and gold; and Plenck's paste, of corrosive sublimate, camphor, carbonate of lead, alum, spirits of wine, and vinegar. Then there is the arsenical powder; together with sulphate of copper, alum, savin powder, corrosive sublimate, calomel, &c.

Where a multitude of things and a multitude of interests are concerned, *classification* becomes an important element of consideration; and as cutaneous diseases combine both these conditions, much thought and much care, in successive ages, have been devoted to the arrangement and classification of diseases of the skin. In the earliest times, and in conformity with the theory of the day, the learned Galen divided cutaneous diseases into two groups, diseases of the general surface and diseases of the hairy scalp; and when it is remembered that a number of diseases were at that time known, and were already distinguished from each other by characteristic names, such as lepra, herpes, lichen, phlyctænæ, and so forth, we are led to agree with Mercurialis (16th century) that the classification of Galen was consonant with the knowledge of the age, and in every way respectable and worthy of admiration. Two centuries later, namely in the time of Lorry, a great stride had been made in medical knowledge, and the distinction of local and constitutional, applied to diseases in general, became the ground of classification of cutaneous diseases. Next, the advancement of anatomy and physiology, which distinguished the textures of the skin, and which necessarily forms the basis of growth of pathology, came in for its share of attention, and we are proud to acknowledge that we ourselves were led, in face of the vast number of cutaneous affections, to consider which might be referrible to the general economy of the true skin, which to its external covering, the epidermis, and which to its glands and secondary products. Then came the day of clinical observation and examination,

of the minds untrammelled by theories and unburdened with the consideration of the structural composition of the organ; these observers noted the pathological lesions and their varieties, and out of this observation sprung the splendidly simple and lucid definitions of Willan. The artificial system was the parent of the natural system; the artificial system separated, the natural system brought together; but whatever the system, when it came to be critically tested, it was found, though excellent in some respects, to be deficient in others, and in the end we are driven to the conclusion that in the construction of a classification, our aim must be to build up one which shall offer the fewest faults; perfection, from the very nature of things, is not to be attained, however eagerly it may be sought. Nay, if we cast back, must not all the theories and schemes which have ever occupied the minds of thoughtful and able men form part of our classification; does not Galen cross our mind when we see the modifications presented by a disease in relation to its seat; is there not great wisdom in the constitutional and the local theory of Lorry; is not the flood of light thrown upon minute and general anatomy, worthy of our admiration, and an undoubted help to future progress; is not the dermatologist of to-day as observant of the appearances presented by the morbid skin as the eminent Willan; and does he not mentally combine these diseases in his efforts to trace the cause and develop a principle of treatment, as did the brilliant and imaginative Alibert?

And now, we may ask, seeing what was done by our forefathers for the advancement of cutaneous medicine, what has been done by the modern school? We have the modern school before us in the person of Hebra, von Barensprung, Simon, Virchow, Danielssen, Boeck, and others; and we must acknowledge that they have done very much. But for our author we must also say, that the morning star which shone at his birth, was the morning star of the dawn of pathology; his early lessons were illumined and inspired by the genius of Rokitansky; and the classification which he was led to adopt owes its permanence and its usefulness to its foundation on a pathological basis; it is as he himself names it a *pathologico-anatomical* classification. "The inadequacy," he observes, of the systems, "and the want of uniformity between the method of classifying diseases of the skin, and that applied to affections of other parts of the body, induced me, as far back as the year 1844, to propose a division of the dermatoses on a pathologico-anatomical basis; in which I adhered for the most part to the doctrines taught by Rokitansky;" and, "according to which

all the diseases of the skin may be reduced to twelve divisions, classes, or families, as follows:—

CLASS 1.—*Hyperæmiæ cutaneæ*.

- „ 2.—*Anæmiæ cutaneæ*.
- „ 3.—*Anomalie secretionis glandularum cutanearum*.
- „ 4.—*Exudationes*.
- „ 5.—*Hæmorrhagiæ cutaneæ*.
- „ 6.—*Hypertrophie*.
- „ 7.—*Atrophie*.
- „ 8.—*Neoplasmata (Homœoplasie)*.
- „ 9.—*Pseudoplasmata (Heteroplasie)*.
- „ 10.—*Ulcerationes*.
- „ 11.—*Neuroses*.
- „ 12.—*Parasitæ*.

The class *hyperæmiæ* embraces active and passive congestion of the skin, and in each instance distinguishes those of idiopathic from those of symptomatic origin; the substantive examples of the affection being erythema, roseola, and livedo.

The *anæmiæ* are divided into such as result from want of blood, and such as are the consequence of perverted nutrition; the examples of the former being anæmia from hæmorrhage, and anæmia consequent upon disease.

The *anomalie secretionis glandularum cutanearum* are necessarily divided between the sudoriparous and the sebiparous glands; the disorders of the former being morbid states, with quantitative and qualitative changes of the secretion, and the substantive affections, bromidrosis, hyperidrosis, anidrosis, chromidrosis, hæmatidrosis, galactidrosis, and uridrosis. The affections of the sebiparous apparatus depart from the title of the class, by comprehending, with morbid states of the secretion, changes of structure of the glands also. The secretions present the two morbid conditions of excess and deficiency; while those in excess are further modified by the absence or presence of impediment of excretion. The substantive diseases embraced by this group are:—seborrhœa oleosa, seborrhœa sicca seu squamosa, and seborrhœa congestiva, seu lupus erythematosus, together with, comedones, milium, vitiligoidea, sebaceous warts and tumours, and molluscum contagiosum.

The *exudationes*, or eruptions attended with exudation from the blood-vessels, is an expression, unfamiliar to English ears, for inflammation and the production of inflammatory products; hence it includes the great bulk of diseases of the skin, and may of itself be regarded as the mass, towards the arrangement and classification of which all Willan's energies were

directed. It is the class *exudationes* also with which the system of pathological lesions of Willan is to be compared, and Hebra will have to show that he can divide it more daintily than our countryman. To compare Hebra's classification with Willan's classification, is to compare two things which have no analogy whatever with each other; Hebra's classification is a classification of general pathology applied to the particular organ the skin; Willan's classification is a classification of the particular organ alone; of inflammation of the cutaneous tissues and their products,—in a word, a classification of the single class of exudating affections of Hebra. Therefore the comparison to be just, must be between the system of Willan and the subdivision of the great exudative class of our author. The present volume contains only the first of these subdivisions, but a glance at the original tells us of what the remaining half of the subdivision consists. The *exudata* are divided primarily into acute and chronic. The *acute* exudata have also a twofold division into contagious and non-contagious. The contagious exudata are the exanthematous fevers, rubeola, scarlatina, variola, and vaccinia; the non-contagious exudata are the erythemata attended with swelling, pellagra, roseola, and urticaria; dermatitis from external cause; dermatitis from internal cause, comprising erysipelas, furunculus, anthrax, pseudo-erysipelas, glanders, and pustula maligna; and the phlyctænosen or vesicular eruptions, namely, herpes, miliaria, sudamina, and pemphigus acutus. Here the volume of the translation before us ends; but already in this division alone, we find the exanthemata, the vesiculæ, and the bullæ of Willan; while in the *chronic* division, are included five groups, corresponding with his orders, squamæ, papulæ, tubercula and pustulæ, two of the groups being the dermatoses squamosæ, and dermatoses pustulosæ. Are we not right then in saying that it would be unreasonable to compare the classification of Willan with the pathologico-anatomical classification of Hebra; and that the points of comparison must be sought for in the one class of exudata?

Hebra, in his preface, has acknowledged that between the period of writing his original work and that of adopting the translation, he has changed his mind in several particulars. We respect him the more for those changes, because they prove him to be human. We would simply note that Hebra is sometimes at war with Hebra, and if such is allowed, we trust that it may also be allowed that another observer may hold opinions opposite to those of the distinguished author before us. We differ from Hebra on several points, which

shall be discussed hereafter, and the contest shall be one of honourable men, who mutually love and respect each other, and will cement their further friendship by those differences which prove them to be self-trusting and independent men. We look eagerly forward to the next volume of the translation; but in the mean time shall return again and again to the "objective" illustrations with which the book abounds, and in closing its pages for the present we have but one regret, namely, that the new Sydenham Society does not embody the whole medical confraternity, so that every member of our noble profession might have on his book-shelves a copy of this most valuable book.

On Diseases of the Skin; a System of Cutaneous Medicine.
By ERASMUS WILSON, F.R.S. Sixth Edition.

HEBRA makes a fair estimate of British Dermatology, and of the disciples of the modern reformer of cutaneous medicine, WILLAN, when he remarks that England, "the country of Willan and Bateman," has taken "the largest share in the Reformation of Dermatology." We need go no further for an illustration of the truth of this statement than the title which heads this article, a *sixth* edition of a somewhat bulky and expensive book in less than a quarter of a century, the consumers and employers of the book being the British medical profession. Can it be said after this that the knowledge of a special branch of medicine is not sought after, is not appreciated—nay, is not wanted? Mr. Hutchinson, in answer to a question lately put to him, "Wherein exists the utility of special hospitals?" replies:—"They are useful as supplying the necessary amount of material for the study of every form and variety of a particular disease; they are useful as the means of training teachers; and teachers of special subjects are the urgent want of the general hospitals." How much longer will it require to instil this truth into the minds of the directors of hospitals; and how long will they be before they act upon its suggestion? It is, in fact, they, by their own *lachés*, who are the real founders of the institutions they complain of, namely, special hospitals. The medical public insist upon leaving no corner of professional learning unexplored; they insist upon acquiring the knowledge of every part of their profession; and, if such knowledge is not to be obtained under the brooding wings of *Alma Mater*, they must seek it elsewhere—wherever, in fact, it is to be found.

But to return to the volume before us. The author, in his Preface, informs his readers "that the present edition has been carefully revised, and in many parts re-written;" and condenses his design of the work, and its arrangement, together with his views of the importance of correct nomenclature, into the following three paragraphs:—

The scheme of the present book is to consider the cutaneous organ : in the first place, in its healthy condition and integrity ; in the second, in its pathological and morbid states ; and, thirdly, in reference to its treatment by the aid of means which have been found capable of restoring its healthy condition when its structure is invalidated by disease. The details of this plan are developed in the successive chapters of the volume :—The first three chapters are devoted to the anatomy, physiology, and pathology of the skin, together with the therapeutical principles which should be our guide in the treatment of its morbid conditions. The fourth chapter takes into consideration the classification of its diseases ; the diseases themselves being collected into twenty-two groups, each comprehended in a separate chapter. Twelve of these chapters, from the fifth to the seventeenth, are engaged with the discussion of the diseases of the skin proper ; three with the cutaneous manifestation of the presence in the system of a blood-poison, namely, the zymotic, syphilitic, and leprous affections ; and the remaining seven, excepting the last, on traumatic affections, with the diseases of the epidermis, the hair, and the cutaneous glandular system.

After much study of the principles of classification, we have succeeded in framing one which, deriving its origin from the nature of the diseases themselves, will, we believe, after careful analysis, be found to be the most simple and the most practical that could be adopted. The suggestion of this arrangement arises from our experience at the bedside of the patient ; hence we have termed it *THE CLINICAL CLASSIFICATION*, and the idea which it embraces is that of taking the most common and remarkable example of the diseases of the skin, namely, Eczema, of studying it thoroughly with its multiple lesions and mutations ; of arraying in its train diseases which are linked with it by natural affinity, and so to create our first group, namely, Eczematous affections. A beginning being in this manner accomplished, the other groups fall into their places almost spontaneously, erythema and bulla by virtue of a tie of relationship, and furunculus a no very distant connection. In this combination we find the material of our first four groups ; and the three following are supplied by the nerves, the blood-vessels, and the blood ; development, nutrition, and growth furnish the two next groups, namely, developmental and nutritive affections, with hypertrophy and atrophy ; and diathesis the tenth, eleventh, and twelfth, namely, alphas, struma, and carcinoma. Older authors and writers were content with these twelve groups : hence an apparent greater simplicity in their works than in those of the present age : but, according to modern views, about half the affections of the skin were omitted, in consequence of this curtailment. For example ; our thirteenth, fourteenth, and fifteenth groups are devoted to zymotic affections, syphiloderma and elephantiasis

Græcorum ; our sixteenth, seventeenth, and eighteenth groups to diseases of the epidermis, namely, pigmentary, phytodermic, and unguinal affections ; then follow, from the nineteenth to the twenty-first, affections of the hair-system, sebiparous system, and sudoriparous system ; and the twenty-second and last, traumatic affections. Twenty-two groups of cutaneous affections may sound somewhat startling to the ear ; but when they are investigated by the understanding, the classification will not be found more copious than is necessary for the clear and precise development of the subject ; it would be difficult to curtail the number with advantage ; and it may be desirable at some future time to increase the sum, for example, by the separation of the hypertrophic from the atrophic affections, which are at present assembled under one head.

Next to precision of classification there is no one thing more needed in cutaneous medicine than precision and accuracy of nomenclature. Dermopathology has reason to boast of a noble ancestry and an ancient literature ; the terms that we employ at the present day are the language of the Fathers of Medicine ; to the student of dermatology, the terms, psora, lepra, lichen, alphos, melas, leuce, herpes, &c., have a deeper and more suggestive signification than that conveyed by the mere words, and, in the following pages, we have endeavoured to invest these terms with the meanings which were attached to them by our ancestors. As a further help to this branch of our subject, we have added to the present edition a glossary of dermatological terms, which will not only give the derivation of the words and their proper application, but will also, it is hoped, act as a restraint upon the terminological innovations of modern nomenclators.

It may be well to take advantage of the opportunity of placing the twenty-two groups of the *clinical classification* side by side with the table of classes of Hebra ; they are as follows :—

CLINICAL CLASSIFICATION.

- | | |
|---|---|
| 1. Eczematous affections | 13. Zymotic affections |
| 2. Erythematous affections | 14. Syphilitic affections |
| 3. Bullous affections | 15. Leprous affections |
| 4. Furuncular affections | 16. Affections of the Pigment system |
| 5. Nervous affections | 17. Phytodermic affections |
| 6. Vascular affections | 18. Ungual affections |
| 7. Hæmic affections | 19. Affections of the Hair-system |
| 8. Developmental and nutritive affections | 20. Affections of the Sebiparous system |
| 9. Hypertrophic and Atrophic affections | 21. Affections of the Sudoriparous system |
| 10. Alphous affections | 22. Traumatic affections. |
| 11. Strumous affections | |
| 12. Carcinomatous affections | |

Description and Treatment of Cutaneous Diseases. Order 1. Papulous Eruptions on the Skin. By ROBERT WILLAN, M.D., F.A.S. London, printed for J. Johnston, St. Paul's Churchyard, 1798.

THE above is the title of a thin quarto volume, which is now before us, and to which our attention has been especially drawn by the following paragraph in Dr. Hilton Fagge's Preface to the Sydenham Society's Translation of Hebra's "Diseases of the Skin."

Mention is made incidentally of a fact which will, I think, be deemed of interest in reference to the writings of Willan. Professor Hebra quotes from a German translation of a work of Willan's, published at Breslau in 1799. Now, the earliest treatise on diseases of the skin by the great English dermatologist, contained in any of the large medical libraries in London, is the quarto, dated 1808 ; and the only reference I have been able to find to any previous work of his on this subject is the statement that the Fothergillian gold medal had been awarded to him in the year 1790, by the Medical Society of London, for a classification of cutaneous affections.

The writings of Willan are so lucid and admirable, and the introduction to the present work so interesting and instructive, as well as being an excellent example of his style, that we had intended to have it printed in the present number of this journal ; but we are constrained, by want of space, to defer our intention until some future period for its performance.*

* Dr. Belcher, of Dublin, informs us that the Library of the King and Queen's College of Physicians of Ireland possesses a copy of this valuable book.

Editorial Commentary.

DERMATOLOGICAL NOMENCLATURE.

WHAT are DERMATOLOGISTS about ? This is a fair question, and one which it is the business of this Journal to answer. We had no sooner made known, through a few friends, our intention of editing a Journal of Cutaneous Medicine, than we were immediately furnished with contributions from various sources, and the sum of these contributions affords the best answer to our introductory question. Dr. McCall Anderson, Mr. Milton, and Mr. Hutchinson are addressing themselves to the investigation of *lupus* ; Dr. Tilbury Fox to that of *tinea* and the present position of the dermatophyta ; Dr. Purdon to *molluscum sebaceum* ; Dr. Belcher to *leucoderma* ; Dr. Marris Wilson to *acne* and its treatment ; Dr. William Frank Smith to the constitution of the urine in *eczema* ; Dr. Fraser to *eczema* and its treatment ; while Dr. Izett Anderson, of Jamaica, has contributed an interesting paper, accompanied with a photograph, on *molluscum simplex* ; and Hebra, of Vienna, an article on *chloasma*, as illustrating the dyschromatodermata.

Several of our contributors allude to the perplexity arising out of the unsettled state of dermatological nomenclature. Dr. McCall Anderson expresses our own deeply-felt convictions, when he protests against the “unnecessary multiplication of names and forms of disease.” And the papers of Hebra, Dr. Tilbury Fox, and Dr. Belcher illustrate the same difficulty. We can only say that we shall use our best exertions to correct this great evil, and endeavour to establish, on unquestionable grounds, an universal nomenclature. Dermatology has but one college, of which the schools of Vienna, Berlin, Christiania, Paris, the United States of America, and England are branches ; and we have but to assemble and submit to a careful judgment the opinions of these several branches, to effect the purpose which we have in view, leaving the adoption of the nomenclature to the good sense of the physicians and surgeons who compose the different schools, or,

as a last resource, to posterity; but we see no good reason why posterity should reap the laurels which the men of to-day have worked so zealously to obtain.

Dr. Belcher's paper on white discoloration of the skin raises the question as to the meaning of the word *vitiligo*. Vitiligo is the term used by Celsus to express the spotted diseases, the word vitiligo being derived from *vitulus*, a calf, an animal remarkable for the spotted appearance of its skin. In the time of Celsus only three spotted diseases were known, namely, vitiligo albida, the lepra alphas of the Greeks; vitiligo nigrescens, their lepra melas; and vitiligo candida, the lepra leuce. The vitiligo albida is the lepra vulgaris of Willan, the alphas of ourselves; the vitiligo nigrescens and candida have both been restricted to the elephantiasis Græcorum, or true leprosy. And although several forms of spotted disease have been distinguished since the days of Celsus, they have received other and more appropriate names, such as melasma, leucasmus, chloasma, &c., and the term vitiligo has fallen into merited disuse. In truth, at the present day, we should feel perfectly unable to comprehend the nature of a disease which was expressed by the term vitiligo—spotted disease. There are many diseases of the skin which are spotted, and therefore the term is indefinite in the extremest degree. "There is, indeed," says Bateman, "a substantial reason for not adopting the term in the acceptation in which it is used by Celsus, namely, that he has comprehended under it three forms, two of which are generically distinct from the third."

But Bateman introduces a signification for the word vitiligo, with which we are totally unable to agree. He describes under this name a very incomprehensible form of disease—indeed, as it appears to us, two forms of disease; thus, after speaking of the affection as "somewhat rare, and perhaps but little known," he defines it as being characterized by smooth, white, shining tubercles, intermixed with shining papulæ; the tubercles attaining their full size in a week, the magnitude of a large wart, and in ten days subsiding completely. Now, we repeat, this form of affection is wholly unknown to us, and we cannot see by what right Bateman names it vitiligo. Is it because the tubercles are white and smooth, and so give a spotted appearance to the skin? "But," he continues, "the tubercles are sometimes slower in progress, less elevated, less tubercular, but more permanent; and as they gradually subside to the level of the surface, they creep along in one direction, as, for example, across the face, or along the limbs, chequering the whole superficies with a *veal-skin* appearance;

all the hairs drop out where the disease passes, and never sprout again, a smooth shining surface, as if polished, being left, and the morbid whiteness remaining through life. The eruption never goes on to ulceration." This latter affection is clearly and unmistakably a lupus, but it requires an unbounded imagination to discover in the cicatrix a "veal-skin" appearance; and he goes on to explain the term—"This white and glistening appearance, bearing some resemblance to the flesh of calves (*vituli*), seems to have given rise to the generic term." Now, what can possibly be understood by likening a thing to veal-skin, because it is *not* like veal-skin, but like veal; and when there is clear evidence in the writings of Celsus, that calf-skin, and not veal-skin, was the allusion originally intended.

Although vitiligo, as presented to us by Celsus, takes in the *black* as well as the *white*, modern authors, with the exception of Sennertus, who describes chloasma under the name of *vitiligo hepatica*, have endeavoured to circumscribe its meaning to *white* only. Alibert, for example, finds a place for it under the head of achroma, giving, as synonyms of achroma, "macula alba, macula albida, albinisme, alpherdemie, leucopathie." His genus achroma contains two species, *achroma vitiligo*, or spotted achroma, and *achroma congenitale*; but there seems to be no reason why the congenital form may not be spotted as well as the first; and we see in Alibert's use of the term only the effort to preserve a word, without a proper comprehension of its signification. For it is clear that achroma guttatum and achroma congenitale would have expressed Alibert's meaning much better than the use of the word vitiligo. Other French authors, who employ the word vitiligo, use it in a similar sense, implying white discoloration.

Our argument makes us aware of the inconvenience of serving two masters, the Greeks and the Latins; and as it becomes necessary to make a choice between them, we propose to reject the term vitiligo altogether, and adhere to the *alphos*, *melaş*, *leuce*, *melasma*, and *leucasmus* of our earlier and more legitimate masters, the Greeks.

The Greek terms, besides their classical origin, have a substantive meaning, which is not the case with vitiligo; nor do we approve of the substantive character given to the word by Dr. Addison and Dr. Gull, in its conversion into vitiligoidea, a vitiligoid affection; for the question still remains unanswered: What is vitiligo? Hence, we have not hesitated to substitute for the term vitiligoidea, one which is expressive of the yellow formation of altered rete mucosum, characteristic of the disease,

namely XANTHELASMA, signifying *yellow lamina*; a disease not very rarely met with in the integument of the eyelids, and generally in the female sex.

Dr. Izett Anderson, in his very interesting case of molluscum simplex, draws our attention to the association in the same person of the three diseases: molluscum, kelis, and elephantiasis Arabum. The general conformation of the tumours is evidently molluscous; their induration in certain situations, and especially in the cicatrix of a wound, is in its character keloid, while the elephantiasis of the Arabians was present in the integument of the penis and of the scrotum. The three diseases, in their pathological nature, are strictly homologous, a *hyperplasia substantiæ connectivæ*, an excessive formation of connective tissue, giving rise to increased quantity and bulk; the hyperplasia affecting the entire thickness of the corium, and also involving the subcutaneous tissue more or less deeply in molluscum and elephantiasis Arabum, and the white fibrous tissue chiefly in kelis.

In treating of these diseases, we are struck by the extreme awkwardness, and at the same time the inconvenience, of the term elephantiasis Arabum, and are reminded that a highly classical word, and one used by our father Hippocrates, is ready at our hand, and in every way appropriate to take its place, namely *spargosis*. SPARGOSIS, a swelling, from *σπαργάω*, to swell with humours, or, as written less correctly, sparganosis, is employed by Mason Good as distinctive of a species of Boucnemia, for example, *bucnemia sparganosis*, the puerperal tumid leg; while the elephantiasis Arabum corresponds with his *bucnemia tropica*.

Returning, then, to the group of diseases before us, that is to say, those represented by the definition *hyperplasia substantiæ connectivæ*: we may divide them into *general*, or such as affect the connective tissue of the entire thickness of the integument, namely, spargosis and molluscum; and *partial*, or such as affect only a part of the structure of the skin, namely the white fibrous tissue, and especially that of the pars reticularis corii, for example, kelis. Viewed in this manner, the analogy of the three diseases is very striking; and although we have for some years past regarded them as allied, we have never before met with them, as in the case before us, all in possession of the same individual and at the same time. We may also take the opportunity of remarking that spargosis may be *idiopathic*, as we commonly observe it, or it may be *symptomatic*, as in the instance of spargosis puerperarum; and that the former may present a number of varieties according to the region attacked, for example, *spargosis cruralis*, or

boucneaemia, *spargosis brachialis*, *spargosis scrotalis*, or, as in a curious case which we have published elsewhere, *spargosis capitis, colli, et humerorum*.

The form of molluscum here referred to is termed *simplex*, to distinguish it from an affection of the sebiparous glands, called molluscum contagiosum, or, to avoid an unnecessary commitment to a theory that may admit of doubt, molluscum sebaceum. Under the head of molluscum we may also find a place for those nævus-like tegumentary growths which we have elsewhere named nævus hypertrophicus; and for those small, pouch-like, tegumentary growths (*ecphyma mollusciforme*) that are sometimes met with on the neck and trunk of the body; and among the rest, for the slender, little, pointed process which has been dignified by the incorrect name of *verruca acrochordon*; the *verruca*, as at present understood, being due to a state of hypertrophy of the papillæ cutis, and not to one of hypertrophy of the connective substance.

Hebra, again, in his paper on the chloasmata, and Tilbury Fox, in his article on tinea, remind us of other debatable points. Hebra uses the term chloasma in the older sense of simple dyschroma of the skin without further pathological change; but the formation of a dyschromatous group drew within its grasp the pityriasis versicolor of Willan, hence chloasma and pityriasis versicolor have for some time been regarded as synonymous. On the other hand, as pityriasis and a simple dyschroma are perfectly distinct in their pathological nature, it becomes necessary to consider the rival claims of the two suitors. We have no hesitation in deciding that Hebra is right in his view of the proper application of the term: chloasma must be associated with melasma, the *epheleida* of the Greeks, and pityriasis versicolor must be transferred to another place. But pityriasis versicolor is almost as widely different from the typical pityriasis as it is from dyschroma; and modern research has discovered in it, besides, a difference of pathological nature: it has for some time past been enrolled among the nosophyta. Thus we have brought before us the diagnosis of three different diseases, namely, chloasma, pityriasis, and pityriasis versicolor. We cannot do better than treat of chloasma as a simple dyschroma and distinct from pityriasis versicolor; pityriasis must retain its original position as an exudative erythema, combined with desquamation, or simply a squamous affection; while for pityriasis versicolor it will be desirable to frame some term that would carry with it the remembrance of its phytiform character; such a term would be *phytosis*, and phytosis might be taken as the designation of the genus; for example, phy-

tosus tonsurans, phytosis favosa, phytosis annulata, phytosis versicolor, and phytosis sycodes. In like manner the terms phytosis capillitii, phytosis barbæ, phytosis folliculorum, and phytosis cutis, might also be found very useful for descriptive illustration.

Miscellaneous Memoranda.

MELASMA LENTICULARE (*lentigines seu lenticulæ nigræ*).—The terms *melanopathia*, *melanoderma*, and *melasma*, are all applicable to *pathological blackness* of the skin. The blackness may offer several shades, and in its distribution, a variety of extent. It may be a mere cloud or a dense stratum of concentrated blackness; it may be *universal*, and distributed over the whole skin, or it may be *partial* in various degrees, presenting one blotch, or many blotches, large blotches, or spots of minute size; again, the blotches may be irregular in figure, or they may have a curved outline, and be oval or round.

In general, *melasma* is slow and insidious, appearing gradually and without local symptoms of any kind; sometimes it is preceded by hyperæmia in a slight degree; and less frequently its approach is heralded by some amount of pruritus. The occurrence of itching may be taken to portend a more energetic hyperæmia, and a more active *melanopathia*; and is most likely to be present when the *melasma* assumes the minuter forms.

Melasma comes under our notice in a twofold character; namely, as an accumulation of pigment in the rete mucosum; and as a general tint of blackness apparently diffused through the entire thickness of the skin, as though it were due to a blackness of the fluids of the skin; in a word, to a state of *melæmia*. In the first of these states, the pigment is always most concentrated around the mouths of the follicles, and in some instances may be limited to that spot; while, in the second, there may be noted a general swarthy and discoloration of the skin, particularly of the face, and that remarkable smoke-coloured hue of the eyeball, accompanied with more or less *melasma* of the eyelids, which we have denominated *melasma oculi*.*

In *melanopathia* there is always present some degree of cachexia, sometimes so slight as only to be detected by the practised eye; sometimes so complete as to realize that advanced stage of fatal anæmia, which first drew the attention of Addison to *melanopathia*. In Addison's cases, as is well known, *melanopathia* was associated with disease of the suprarenal capsules,

* Vide "Dyschromatoderma; or, Discoloration of the Skin."—*British Medical Journal*, 1863.

with a state of disease which, by means of its nervous sympathies, and probably by irritation communicated to the spleen, occasioned destruction of the red corpuscles of the blood ; and, according to the teaching of Frerichs, of Berlin, converted the carbonized elements of those corpuscles into pigmentary matter. But further observation has shown that disease of the suprarenal capsules is not an essential condition of melanoderma, and that disease of any of the abdominal organs, and especially the spleen and the uterus, may give rise to a similar pathological condition.

These remarks are suggested by a case which has just come before us, and is now under treatment ; a young lady, aged 25, who has at present, and for the last three years has had, scattered over the trunk of her body, and upon the thighs, down as far as the knees, small circular and oval spots of a rich brown-black colour, resembling freckles, and suggesting the appellation black freckles, *lenticulæ nigrae*. They occupy the plane surface around the mouths of the follicles, and sometimes include only one follicle, and sometimes three or four, and vary in size from one to two lines in diameter. They were first apparent around the waist, and gradually spread upwards to the upper part of the chest, both before and behind, and downwards, over the abdomen and loins, to the thighs, and thence as low down as the knees. They are dispersed at intervals of about an inch in some places, and in others are more distant ; they have been increasing in numbers for three years, and when once formed remain permanently fixed, and they give an unseemly spotted appearance to the skin. They are flat, and when fully developed, give rise to no uneasy sensation, but are preceded at their first appearance by small itchy papulæ of a red colour.

The aspect of the skin of the body and limbs is healthy in every way ; but her countenance is slightly pallid, the skin somewhat cachectically discoloured, the lips and tongue deficient in redness, the sclerotica unhealthily white ; slight melasma palpebrarum, and equally slight melasma oculi. Compared with her sister, standing beside her, there is a want of freshness of colour, a smokiness, or cloudiness, or opacity of the skin ; but yet there is nothing which would be marked in her intercourse with the world as morbid in appearance ; she may be said to look in health ; and she declares that her health is good in every particular.

While a popular observer might pass her as healthy, there is a something with which the medical observer would not be wholly content ; and if he were unable to distinguish the melasmic eyeball and eyelids, he might be surprised at our diagnosis. We pronounced our diagnosis, and then we proceeded to a more searching inquiry into the patient's health. She had had no fright, no nervous shock, no affliction—those fruitful sources of melano-pathia ; but she gave this short and pathognomonic account of herself. Three years ago she first noticed these spots, and remarked that they were red and itchy when they first appeared, and subsequently and gradually became black. She made application to a medical man, who administered arsenic, which she took for some time, but without any result. At this time she had occasion to complain of hæmorrhoids, and has since suffered occasionally from ascarides. She also suffered at the same period from a dull heavy pain in the left hypochondriac region, which incommoded her when she lay down

in bed and interfered with her sleep. There was, besides, some degree of debility and loss of appetite, and the poverty of appetite has continued until the present time.

Now, here is small matter for a diagnosis of melæmia ; but yet sufficient to prove an interruption of the circulation in the portal system, and probably an irritation of the spleen ; precisely the conditions the most influential in developing melæmia and anæmia ; and to this pathological state we trace the origin of the melanitic spots upon the skin.

It may be asked, what did we advise in the treatment of this case ? We found that the medical man into whose hands the patient had entrusted herself had recommended the use of cod-liver oil. In this recommendation, as tending to improve the nutrition of the body, we entirely concurred, and we suggested in addition the citrate of iron and quinine, with a view to improve hæmogenesis, and the local use of iodine as a cutaneous stimulant. As remedies for future use, we hold in reserve phosphoric acid with liquor strychniæ, and arsenic in combination with iron.

ALPHOS PAPULOSUS.—Anomalous cases of disease have more than a passing interest ; they are interesting in their aberration from a normal standard, and they are important as illustrating the special and peculiar characters of the type to which they belong. This is the view which we take of the case presently to be described, and we look upon it as eruption arrested in development at its earliest stage, and presenting besides an unusual feature of development. It is well known that alphos, the *lepra vulgaris* of Willan, begins by hyperæmia at the mouths of the hair-follicles, and at its earliest appearance is little more than a mere point, about one line in diameter,—*alphos punctatus* ; but other points are gradually formed in the neighbourhood of the first ; the minute spots coalesce, and in a short time a small circular prominence appears, which is quickly surmounted by a roof or cap of silvery and spongy epidermis. In this early beginning of alphos there is very little rising, none of the tubercular prominence which takes place at a later period ; and although in advanced stages of the disease the small spots may sometimes be discovered, yet, as a rule, they are generally lost in the formation of the circular disks which are especially characteristic of the eruption. In a lady, aged 35, who is the subject of the present case, the eruption of alphos made its appearance for the first time five weeks ago. She was confined three months back, and a month after was seized with rheumatism, from exposure to cold. The rheumatism lasted for three weeks, and at its decline the present eruption became manifest. It is dispersed over the whole body, but is most abundant on the forearms and legs, and is absent on the elbows and knees. The eruption consists of prominent pimples, exactly resembling the papules of lichen, occupying the mouths of the hair-follicles, and surmounted by small glittering white caps of spongy epidermis. The size of the papules ranges between one and two lines in diameter, and they are remarkable for their prominence and conical figure. In the majority the base of the papule swells out beyond the limit of the small central scale, and forms a red border around it ; and in some few places the papules have subsided, and have produced a small patch not unlike that of incipient alphos vulgaris. But, as we have already said, there are none of the charac-

teristic disks of alphos, and there is an absence of the eruption on those pathognomonic localities the elbows and knees. To the first observation the eruption is a disseminated lichen, but it is wanting in the pruritus of lichen ; and the eye is immediately struck by that most characteristic point of structure, a white glistening scale of laminated and spongy epidermis. It is not an alphos punctatus, because the latter term designates a state of mere congestion ; but it is unequivocally a papular alphos, an alphos papulosus ; an arrest of alphos at its earliest stage, combined with an exudative development in the papular form.

JUBILEE OF PROFESSOR HEBRA.—Under this title the *Medical Times and Gazette* gives the following interesting account of the triumphs of science and learning in the person of our distinguished colleague. Long may he live to enjoy his honours and confer the blessing of his knowledge upon the wide world of which he is a noble citizen. “One of those pleasing incidents of German university life that characterise the affectionate relations which prevail between professor and pupils among our German *confrères*, recently occurred at Vienna. Professor Hebra having just completed twenty-five years as perhaps the ablest teacher of skin diseases who has ever existed, it was resolved by his present and former pupils to take the occasion of this jubilee and to give him an ovation. On the Professor entering the theatre where he had taught for so many years, he was received with loud cheers by a crowded auditory, and his assistant, Dr. Kohn, delivered an oration setting forth in emphatic terms how much dermatology stood indebted to his labours, and presented him with an address inclosed in a luxurious and artistic envelope. In reply, Hebra dwelt upon how much he owed in the beginning of his efforts at the reformation of dermatology to the stimulus he derived from Professor Skoda’s critical and creative mind. In reviewing the progress of dermatology, he observed that the so frequently denied, but now universally admitted, itch-insect is really the starting-point in the improvement of our knowledge of the pathology of the diseases of the skin. Through the demonstration of its unsightly presence, the psoric diathesis, and with this a whole series of other diatheses, were ascertained. We are at present, he observed, only at the A B C of dermatology, and must learn to read the skin ; and from many examples it clearly results that dermatology in the future may present important indications concerning diseases of internal organs. The speaker could only wish that in the future it may engage the earnest attention of Physicians.”

DANGERS OF DYEING THE HAIR.—Art is progressive ; a few years back, when the mania for altering the shade of colour of the hair first broke out, ladies were content with washing their heads with an alkaline solution, soda or potash, until a considerable portion of the colouring matter was removed, and with it, of course, much of the freshness and silky beauty of the hair. This bleached hair, which approached artificial or dead hair in its qualities, was then polished with a little oil, and the process was complete. But chemistry has now enabled the artisans of hair to move a stage onwards ; to add a dye in the place of the abstracted natural colour, and to convert the head into a kind of coloured mop. It comes to pass thus : the head is washed with an alkaline solution, and dried near the fire ; this part of the

process occupies an hour. The manipulator then brushes through the hair the dye, an acid solution of varying strength, and the exhausted and dry hair is made to absorb this fluid by the aid of hot tongs and hot plates of metal. This latter part of the process demands care and skill, and time also it would appear; for our informant, the lady operated upon, reports that the whole proceeding occupied seven hours and a half. But at last came the result—not the end, but the beginning of the end. When the lady rose from the operating chair, she was charmed by the vision of a pale gold *chevelure*, her natural colour being a dark brown; and she went to her home in perfect delight. But in a very few hours the vision began to change, first to a bright orange-yellow, and then to a deep yell of egg yellow that was perfectly hideous. To correct this evil, another operation was to be gone through, another seven hours and a half of tedious and painful manipulation; and this time, like the last, with a similar result,—first the golden sheen of the rising sun; but, as evening advanced, a deep saffron and red tint like the setting sun portending a coming storm; or, rather, like the elfin locks of the demons of a pantomime. The lady's disappointment and vexation may be more easily imagined than described; she was advised that nothing more could be done; that, if she disapproved of her present appearance, her head must be shaved; and she submitted to the necessity and to the consequent annoyance of wearing a wig. The proceeding we are now discussing is called the "instantaneous" process, and we have styled it an operation, having in our mind a surgical undertaking; the suffering was so severe, says our informant, that she was obliged to scream with pain, the burning was so intense that she walked about the room in a frantic state; and sal volatile was administered to keep up her strength. More than a week after this grave operation she came to us to be relieved of inflammation of the scalp, and the effects of a superficial gangrenous burn. She complained of a feeling of lethargy, and feared that some poisonous matter might have been absorbed through the scalp into the system; and it was clear that her nervous system had undergone a serious shock, and that she had escaped by a very narrow margin from an attack of deranged function of the liver verging on jaundice. On the sixteenth day after the operation the gangrenous burn remained unhealed.

GREGARINÆ.—The *Lancet*, in pursuance of a laudable endeavour to induce ladies to relinquish false hair, and illustrate the favourite quotation that "beauty unadorned is adorned the most," has introduced to its readers a *bogey* from Russia invented by a certain or uncertain Professor Lindemann. The *bogey* is a parasite, found at or near the ends of hair collected for the purpose of manufacture into *chignons* and other false adornments of the head. It is sufficiently large to be detected by the naked eye, and it gives rise to little dark-brown knots, the so-called *gregarines*. Of course they retain their vitality in spite of drying or boiling, in fact, they would not be parasites unless they had properties of some outrageous kind or another; however, they cannot stand acids, alkalies, or ether; but the sly foxes are clever enough to discover that the hair cannot stand them either, so they feel themselves perfectly safe. Professor Lindemann has, by some curious process, discovered that these parasites are engendered in the interior of the more vulgar parasite, the *pediculus capitis*; but it is all the same to them, inside or outside,

they are equally happy and equally ready to perform their part in the vast drama of creation. They are by no means rare : seventy-five per cent. of the unmanufactured hair is infested by them ; but their most brilliant qualities remain undeveloped until they *come out* in society, in other words, until they are introduced to the ball-room, and then—why then, let the reporter speak for himself :—in a ball-room they “revive, grow, and multiply by dividing into many parts, the so-called germ-globules ; these fly about the ball-room in *millions*, get inhaled, drop on the refreshments, in fact enter the interior of people by *hundreds of ways*, and thus reach their specific gregarine development.” Nevertheless, the ball-room is a very pleasant place, and the sandwiches not unsavoury ; but we are fairly puzzled at the hundreds of ways of getting into our insides ; they surely must have mistaken their destiny or perchance have mistaken the noblest and most beautiful denizen of a ball-room for a —— well, for a *pediculus*. Not the least curious in the history of the *gregarine* is its round of life : its humble beginning in the ventriculus or probably in the colon of a louse ; then its temporary abiding place amidst the fibrous texture of the hair ; then its transference to the ball-room in the *chignon* of the belle of the season ; then its revivescence and germ-globulation, its millionaire subdivision ; then the diffusion of the germ-globules through the perfumed air, their halt upon the lip of a champagne glass, their happy return to the ventriculus and colon of a higher organization ; and then that wonderful series of solutions, and cell-telegraphy by which they “reach their specific gregarine development” ; meaning thereby, we suppose, by which they find their way back to the appendix vermiformis of the louse, and then to the hair. The exponent of this magnificent theory cannot surely dispense with the louse, as a link in the chain of the utmost importance. Gravely, we believe that if there be a Professor Lindemann, we hold him innocent of all this nonsense ; no scientific man in the world could profess such absurd ignorance ; and we advise ladies, if they like it, to wear *chignons* on their chins as well as on their occiputs ; the Christmas *little account* is the only gregarine they need fear ; but some of them will have to tremble then. And yet we are not quite sure, for beings that can afford to sweep the streets of London with expensive silks and velvets, will think a matter of twenty guineas for a coiled chignon a very small affair indeed ; and in truth it is not they that pay the bill, after all—it is *only* their papas and their husbands.

EPITHELIOMA AMONGST THE KASHMIRIS.—Mr. Emslie tells us that in May, 1865, a Medical Mission Dispensary was established in the capital of Kashmir, and remained open till the end of the season (the middle of October), when Europeans migrate to the hills. Some 5,080 cases applied for relief, and out of these there were 30 cases of epithelioma, proved by the general and minute history of the instances ; that is to say, one case in every 254 patients. There are differences observable in reference to the disease as it occurs in Kashmir and England, especially as to its seat ; for whilst in England it occurs rarely before forty, in 7 of the 20 cases of Mr. Emslie it appeared earlier, and in one case in a child three years old. It has great predilection for the abdomen and inner part of the thigh. In the 20 cases mentioned, the disease was situated in one of either of these two parts. This is accounted for by the fact that men and women, young and old, are in the

habit of carrying about with them what are called *kangris*, earthenware pots, covered with wicker-work, and more or less ornamented to suit the price and taste of the buyer—in fact, they are portable braziers, in which they burn charcoal; and in cold weather these are carried next to the bare skin of the belly, under the loose garment which is worn, and when in-doors or in a sitting position, are placed by the Kashmiris between the thighs. Mr. Emslie thinks that it is to the use of the *kangri*, and its contact with the belly and thighs, that the determination of epithelioma to the spots named is to be attributed. The fact harmonizes well with the occurrence of epithelioma of the lower lip in inveterate smokers of *short* clay pipes.—*Lancet*, Jan. 5th, 1867.

VACCINAL SYPHILIS.—An outbreak of vaccinal syphilis having been reported in the department of Morbihan, Dr. Depaul was sent to investigate the matter. He inquired into the history and, as far as possible, examined the first batch of cases, 42 in number, and subsequently a second series of children vaccinated with the lymph of like character to that which had been previously used for the original cases. Dr. Depaul states that he found all the characters of secondary syphilis present in the majority of these vaccinated children: there was a coffee-coloured rash, cervical adenitis, lasting a long time, and cured by anti-syphilitic remedies. Dr. Depaul concludes—(1) That the infants were affected with syphilis, and (2) that it is impossible to explain their contamination except by the vaccination; (3) that the origin of the virus was the lymph used by a midwife, and derived from two children, and originally obtained from the Prefect of the district.—(*Bulletin de l'Académie Impériale de Médecine*, t. xxxii., No. 4, Nov. 30th, 1866.) The interesting discussion on vaccinal syphilis which took place at the Academy of Medicine, and in which Depaul, Ricord, Jules Guérin, Trousseau, Devergie, Briquet, Gibert, Bouvier, and Bousquet took part, will be found in the *Bullet. de l'Acad. de Méd.*, 1864-5, t. xxx., p. 136, et suiv.

VENEREAL MALADIES OF DIFFERENT COUNTRIES.—M. Gustave Lagneau's paper in the *Gazette Médicale de Paris* for December 29th, 1866, is interesting. He concludes—(1) that genital ulcerations are common, especially in English colonies and Northern America; rare amongst the Arabs and Algerians. (2) That constitutional syphilis, on the other hand, is of frequent occurrence amongst the indigenous people of Algeria, and its signs are not numerous amongst the Blacks of the English colonies of America, of Africa, or Ceylon, who have a good number of genital ulcerations. (3) That the evolution of syphilis is more rapid in cold than hot climates; in Christiania than France, for example; in France than the tropical climates. (4) That buboes, which accompany the genital ulcerations, are common in China, Cochin-China, Polynesia, Mexico, Nova Scotia; more so there than in cold climates generally.

LEPROSY.—Dr. Brussac (*Archiv. de Médecine Navales*, Nov. 1866, No. 5) has a good paper on Elephantiasis. He describes the anæsthetic phase under the term Elephantiasis aphymatode, directs attention to the pemphigoid eruption in it, and to a form of leprosy, chiefly ulcerative, which attacks the mucous surfaces of the palate, pharynx, and nasal fossæ; accompanied by the ordinary blotches and maculæ of the surface; and the phalanges dis-

appeared without paralysis or anæsthesia : it seems to be the ordinary anæsthetic variety, in which the mucous surfaces are especially involved.

FURUNCULUS.—Dr. Devalz (de Sainte-Foy) gives his experience of Furuncles in a paper in the Proceedings of the Medical Congress at Bordeaux, 1866, entitled “*De la Malignité des Furoncles et des Anthrax de la Gironde.*” The people of Sainte-Foy think the furuncles contagious ; but Dr. Devalz shows that with the Sainte-Foy folks anthrax is not a malignant affection. In the same journal Dr. Soulé, of Bordeaux, relates his plan of treating carbuncles : he makes eschars first of all with Vienna paste, and the next day incises them, and in this way avoids making any wound which will absorb discharge and the like, and so prevents, the doctor thinks, purulent infection. He also neutralizes any discharge by the application of tincture of iodine ; he thinks the use of the bistoury as a rule is bad ; that furuncles require emollients and temporization ; that serious inflammation and great swelling alone call for incision ; that malignant furuncle is to be treated by caustic followed by incision, which secures softening of the tumour and prevents absorption.

PATHOLOGY OF THE TUMOURS OF SYPHILIS, LUPUS, LEPRO, AND GLANDERS.—We abstract from an able article on “*Virchow’s Lectures on Tumours,*” in the *British and Foreign Medical Review*, the most recent opinions of that distinguished pathologist, with regard to the subjects of our heading. The tumour-like masses found in these diseases occupy an intermediate pathological position between inflammatory products and true tumours, but in many instances possess so decided a form as to be entitled to rank with tumours. Hence Virchow distinguishes them as *granulation tumours*, and their special structural constituent as *granulation tissue*. Granulation tissue takes its origin in the connective tissue ; the cells of the latter, by partition and multiplication, form groups of small round cells, resembling lymph-cells, and the assemblage of these small round cells constitutes the granulation tissue. Under other circumstances, the small round cells might ripen into connective-tissue cells, or they might be converted into the cells of sarcoma, but in the granulation tissue they retain their elementary form, never rising above it, but tending to soften and degenerate. In the composition of a tumour, these small round cells are collected into groups lying in the midst of intercellular substance, the whole mass tending to fatty degeneration. The *gummed tumour* of syphilis is composed of this granulation tissue, as is also the mucous tubercle ; and not only these, but the indurated base of a chancre, and the primary granule or tubercle which precedes the formation of a chancre. In the latter instance, the granulation tissue softens and breaks up, and then an ulcer is produced. The syphilitic virus would appear to act upon the tissues of a part as an irritant in two ways, or with two degrees of force. In the milder degree it occasions inflammation, with an increase of quantity of the tissue, and consequent thickening ; in a severer degree it induces the formation of granulation tissue, and subsequent degeneration. These pathological changes may take place in any part of the frame, as well as in the skin, and they are the common phenomena of internal syphilis. The metamorphosis into granulation tissue is most apt to occur where syphilitic inflammation has

previously existed, and the gummed tumour is generally surrounded with a nest of cicatrix tissue, the product of the milder degree of irritation. Comparing syphilitic tumour with cancer, Virchow points out that both begin as tumours, the one with induration, the other with a primary or mother nodule ; both affect the nearest lymphatic glands ; both spread by metastasis, and involve distant parts ; and both begin alike by a repetition of the primary induration. The tubercle of *lupus* is composed of young, soft, vascular granulation tissue, arising in the connective tissue of the derma, and spreading inwards to the deeper structures. After a while the centre of the tubercle softens and breaks down, and an open sore or ulcer results. Virchow and Hebra are agreed that only one remedy exists ; namely, destruction of the morbid tissue with caustic. The same authorities are also agreed on the non-identity of syphilis and lupus, because (1) in the autopsy of persons who had been sufferers from lupus, no trace of internal syphilis is found ; (2) lupus is very chronic, painless, and without cachexia ; and (3) in lupus there is no affection of neighbouring glands. The latter symptom also distinguishes lupus from scrofula, a special glandular disease ; whereas, in those suffering under glandular scrofula, lupus is absent. The tumour of *lepra* (elephantiasis Græcorum) is in structure akin to that of lupus ; it is rich in cells, and more enduring than other granulation tumours ; the tissue softens and breaks down in the same manner, but the tendency to degeneration is not so constant. Apropos of the ulcerating and mutilating attributes of leprosy, a foot-note reminds us of a very unlikely occurrence. “ Von Hasselaar relates the case of a mulatto affected with advanced leprosy, who, on walking into his house, knocked his head against the door, and fell down with his head separated from his body.” The little yellow tubercles of *glanders*, and the somewhat larger tubercles or buds of *farcy*, are also examples of the granulation tumour. That of glanders approaches in character most nearly to lupus, while the tubercle of farcy is more chronic and persistent, and more nearly allied to the tubercle of lepra. When the tubercles of glanders and farcy are situated at the surface, and soften and break up, they give rise to ulcers ; but when they are deeply seated, they produce, by a similar process, abscesses.

Correspondents.

We have the pleasure to acknowledge the receipt of a “ Review of German Literature on Dermatology ” from our correspondent in Vienna, Dr. Maurice Kohn ; also contributions from Dr. Tilbury Fox, Dr. Begley, and Mr. Milton ; which will appear in our next number.

Correspondents and Contributors are requested to direct their communications to the address of the EDITOR, 17, Henrietta Street, Cavendish Square.

LECTURES ON CUTANEOUS MEDICINE AND DISEASES OF THE SKIN,

BY ERASMUS WILSON, F.R.S.

LECTURE II.

On the Pathology of the Skin.

GENTLEMEN :

IN our preceding lecture we took a survey of the territory which we propose to investigate ; we studied the map of the region whose natural intricacies it is our business to compass ; we took a general review of the disturbances that might by possibility arise, that we may prepare ourselves with the means of regulating and controlling such disturbances and disorders whenever they occur. We looked upon the integument as composed of a derma, an epidermis, and a subcutaneous areolar tissue, and in each of these three divisions we met with separate points for consideration ; in the epidermis we found a formative growing layer, the rete mucosum, and a perfected horny layer ; in the derma we discovered a follicular and glandular structure, together with vessels, nerves, connective tissue, and muscular tissue ; and in the subcutaneous web we noted the presence of connective tissue, adipose tissue, and the cæcal ends of the larger hair-follicles. But however much we might be disposed as physiologists to admire the beauties of structure and adaptation of the cutaneous organ, in its whole and in its parts ; yet as pathologists and especially as dermo-pathologists, our view of the integument was associated with the contemplation of its possible abnormal and morbid derangements. Instead of being smooth and clear and flexible, the horny layer of the epidermis in a pathological state may become rough, opaque, and brittle ; the rete mucosum may be altered in colour and in structure ; and the several components of the derma and its subcutaneous layer may be changed in their appearance and function.

We have considered the chief of the pathological changes affecting the derma, under the heads of redness, swelling, heat, and pain; the *rubor, tumor, calor, et dolor* of simple inflammation. We recognize in *redness* the distension of the capillaries with blood; we noted the differences of character presented by the redness when the hyperæmia occupied the peripheral surface, and when the follicular inflexions of the derma, in the former case producing a general suffusion, as in blushing; in the latter a punctulation, as in measles. We remarked on the variety of the tints of redness, from the scarlet of scarlatina, through the ruby hues of rubeola, to the purple and the livid of cyanosis; we took under our consideration the abnormal coloration of dyscrasia as illustrated by syphiloderma; and we may add, further, to these modifications of colour, that which results from the exudation of blood from its vessels, as in the instance of purpura and contusion.

Swelling, in various gradation, we found to be a common associate of cutaneous disorder, in some measure resulting from distension of the capillaries, and the consequent accumulation of blood in the skin; but in a greater degree from the absorbent action of the cell-elements of the derma. The presence of swelling betokens a state of disturbance of action of the cell-elements of the tissues affecting their nutritive function; and under the influence of that disturbance they absorb with rapidity and eagerness the fluids brought to them by the blood-vessels, and become distended and enlarged, the sum of this enlargement being the measure of the amount of swelling produced. In physiological hyperæmia, as in blushing, there is doubtless a transitory state of swelling of the skin; and we know that by a repetition of such flushes a permanent enlargement of the capillary vessels, or, as it is termed, *angeiectasia*, is produced, which is often accompanied, as in *gutta rosacea*, with enlargement and thickening of the corium of the skin. In that more extensive and prolonged flush of the skin which accompanies the *exanthemata*, the swelling is general, and, as we know to be the case in *variola*, often so considerable as to distend the head and features to a frightful degree.

There can be no doubt but that swelling is very much modified by the sthenic or asthenic condition of the cell-elements of the tissues, and that the sthenos or asthenos of the latter is to a very considerable degree under the influence of the tone or power of the constitution. In a mild example of *variola*, or *scarlatina*, with abundant hyperæmia, the swelling may be moderate, while in another case, where the constitutional powers are depressed and the tissues participate in the general weakness, the swelling may be excessive, although the

hyperæmia is only slight. To these causes must be attributed the excessive swelling which accompanies erysipelas; and the frequent association of extensive swelling with chronic affections in which both the tone of the system and of the cell-elements of the part is reduced. Wherever much connective tissue prevails, to the exclusion of blood-vessels, as in the eyelids and scrotum, there swelling is a common and striking occurrence, or when the circulation is weak from its peripheral position, as in the nose and extremities. While on the other hand, there are certain forms of swelling, such as that which accompanies erythema tumescens, wherein the cell-elements of the tissues would seem to be chiefly in fault. We have an example of swelling dependent on a local asthenia in the very considerable tumefaction that usually accompanies the sting of a wasp, and sometimes the bite of less venomous insects; but we at the same time know full well that any extraordinary tumefaction is always associated with some degree of asthenia of the individual, and we note the occurrence of extreme swelling as an unusual phenomenon.

The conclusion to be drawn from these examples would therefore appear to be that while tumefaction is undoubtedly due, as its proximate cause, to an excessive absorbent action on the part of the cell-elements of the tissues; yet that that excessive action, if not asthenic from the first, speedily becomes so; and that its sthenic or asthenic character is under the immediate influence and partakes of the nature of the general constitution. Upon the same data we are permitted to frame the theory, that in proportion to the debility of the cell-elements will be the more aqueous quality of the fluids absorbed, the retinence of the aqueous condition, and the nearer the approach of the swelling to the state of œdema. While on the other hand, the assimilation of the ingested fluid, and the expulsion of its excess, will demonstrate the existence of a more vigorous cell-power, and lead to a more speedy dispersion of the tumefaction.

We moreover remarked, that the sensations of *heat* in the morbid skin were in general greatly disproportioned to the actual temperature, in consequence of the heightened sensibility of the organ; this is remarkably the case in herpes, the *zona ignea*, and sometimes also in eczema. In the latter disease we have noted the temperature as high as 103° , while in scarlatina and erysipelas it sometimes reaches an elevation of 104° or 105° ; and in anæsthetic elephantiasis it has been found, in the hands, as low as 68° , and rarely higher than 90° .

Under the head of *pain* we enumerated a goodly list of morbid sensations; but we may further illustrate this point by

mentioning the following catalogue of painful sensations drawn up by a patient suffering under hyperæsthesia. At various times she experienced dull pains in the skin, acute transient pains, shooting, darting, pricking, smarting, tingling, itching, crawling, and burning pains, with sensations of throbbing, quivering, trickling, shivering, and trembling; sometimes the skin has a sore or rubbed feeling, and is always unnaturally tender and sensitive, and more sensitive to slighter stimuli than to those of a severer kind. This strange list of sufferings is attributable to hysteria, the common parent of abnormal feminine disturbances; but we may be permitted to question the degree to which the uterus is answerable for such abnormal symptoms; they sometimes occur in men, in which case hysteria is clearly out of the question; but the real cause is in fact disturbance of function of the coeliac centre of nervous plexuses; hence a more appropriate and correct name, than hysteria, would be *coeliaca*. The term *coeliaca* would be applicable to men as well as to women, and would better express the nature of the pathological derangement; since hysteria is, we believe, as often an effect of a central nervous irritation as the cause of a radiation of morbid sympathies. In the case to which we have just referred, the patient was a lady of strong mind and good common sense, and her nervous sufferings were a source of as much surprise and vexation to herself as they were to those around her. Her illness began by a nervous shock, fright, and affliction; the seat of injury consequent on her suffering was doubtless the solar plexus, and from this plexus as from a centre her morbid sensibilities took their rise; the uterus suffered with the other abdominal organs, and more particularly with the alimentary canal; but this attack, and the consequent hysteria, were in reality a secondary result. Among other morbid sensations which this lady experienced, was the consciousness of the movement of the blood through its vessels, and an inward sense that occasioned involuntary fright and alarm.

From the more general signs of pathological derangement of the skin, already mentioned, namely, redness, swelling, heat, and pain, we may next proceed to the particular and special signs, which are usually termed *lesions*; and we cannot do better than study the pathological lesions of the integument side by side with the commonest and most universal of the diseases of the skin, namely, eczema. Eczema, as a word, simply means *eruption*, and it may well be said, that it is *the eruption* of the skin; as the most common of the eruptions it is that which comes the most frequently under our observation, and is therefore the one to which we can most readily refer,

the most easily study, and with which we can with the greatest facility compare other forms of cutaneous disease. The word *eczema* was given to this very common eruption by the Fathers of Medicine, namely, the Greeks; but they also had another name for it, which expressed one of the most prominent of the characters or qualities of the disease,—namely *psora*, and we must endeavour to pronounce the *p* as well as the *s* in this word to give it its proper effect. Now *psora* means *the itch*, because of its itchiness, because, in fact, of the necessity, which is induced by its itchiness, to rub and to scratch; the word *psoein* means to rub, and *psoriaein*, to have the *psora* or itch. This is the language of Hippocrates, who dates back five hundred years before the Christian era; and these words are as applicable to the disease in question at the present hour as they were in the time of our great predecessor. But let us pursue the matter a little further. “Familiar to our ear as household words” are the terms *eczema* and *psora*, and so also is another word, *psoriasis*; but until now it may not have been known to you that *eczema* and *psora* have the same meaning, and are in fact synonymous; that *eczema* announces the *eruption* only, whereas *psora* represents the most marked and troublesome of its *symptoms*, its *psoric* or itchy tendency. By-and-by, we shall have to point out to you that *eczema* or *psora* presents two very marked and distinctive forms represented by the words *humidum* and *siccum*; namely, *eczema humidum*, *eczema siccum*, or *psora humida* and *psora sicca*. The moist form is distinguished by moisture or discharge, and the dry form by dryness and a consequent exfoliation of the cuticle in small scales; *eczema siccum* or *psora sicca*, is therefore squamous as well as being itchy, and in these two qualities combined we find the explanation of the word *psoriasis*; *psoriasis*, in fact, being the squamous form or stage of *psora*, of which it is an obvious derivative. It is important to remember this, because the word *psoriasis* has been generally misapplied since the time of Willan, and the evil has been increased of late years by the assignment of the term to the alphas of the Greeks, the *lepra vulgaris* of Willan. We also beg to remind you that the *a* in *psoriasis* should be pronounced long, namely, *psoriāsīs*.

But we must say a few words more with regard to *eczema* before we commence to observe it more carefully. It may seem to you that we attach too much importance to the meaning of a word; but, gentlemen, we must ask you to accept in faith that which we now declare to you; we have not laboured at the study of cutaneous medicine for thirty years without having come to certain positive conclusions, and conclusions

which we believe to be founded in truth. One of the first articles of cutaneous faith that we call upon you to subscribe to, if you would in future be ranked as our disciples, is, that eczema and psora are identical, and that psoriasis is a stage of psora. When the time comes, we shall be equally able to prove to you that that other disease which is now so commonly termed psoriasis by the Foreign schools, is not psoriasis, but is really the *lepra alphas* of the Greeks, the *lepra vulgaris* of Willan. But, gentlemen, we have other masters besides the Greeks, and masters whom it is our delight to honour,—namely, those worthy successors of the Greeks, the Romans. Greatest among the Roman physicians was Celsus; and Celsus designates psora and eczema by the terms *scabies* and *impetigo*; *scabies* derived from *scabĕre*, to scratch, itself a derivative of *scaphein*, to dig as with the nails in scratching, is the analogue of psora; while *impetigo*, *ab impetu agens*, a breaking out with impetus, corresponds with eczema; and all the four terms apply to the same disease. At the present time, however, we dispose of these four terms differently; eczema we retain as the type of the psoric affection; impetigo, we apply to a pustular eczema; scabies, we restrict to the eczematous eruption, excited by the *acarus scabiei*; psoriasis we give to the dry and squamous eczemata, especially when associated with thickening and cracking of the skin and much pruritus; and psora we discard, as having no special occasion for its use.

Gentlemen, we offer you no excuse for this digression from our subject; we have led you over classic ground, and through a territory in which disputed questions prevail, but we have endeavoured to guide you with the lantern of knowledge to the temple of the veiled goddess whom all true worshippers of science most venerate; and we conclude our episode by informing you that although in cutaneous medicine we are ungracious enough to have rejected the ancient term *psora*, yet that we retain it in our popular language in the simple and forcible expression *sore*.

Well, gentlemen, if we have a subject before us suffering from eczema, we shall inevitably find *redness* or hyperæmia more or less extensively distributed; we shall have *swelling* or thickening from infiltration of the affected skin; we shall possibly discover an elevation of temperature; and we shall pretty certainly be made aware of *pain*, commonly in the character of burning or scalding, itching, and probably tingling and pricking. But besides these morbid states, or lesions, the common signs of inflammation of the skin, we shall meet with minute elevations, which are termed *papulæ*, or pimples; or small elevations filled with a transparent albuminous fluid,

namely *vesiculæ*, or vesicles ; maybe with small vesicles filled with pus, vesico-pustules, or simply *pustules* ; then we shall find *excoriations* exuding a viscous albuminous fluid, sometimes transparent and sometimes purulent ; or the thickened skin may be fissured with *chaps* ; or there may exist coverings of different kinds on the inflamed corium, sometimes assuming the character of *crusts* or *scabs*, and sometimes of small *scales* undergoing constant desquamation. Again, we may observe, in conjunction with these lesions, *scratches* denoting the operation of the nails for the relief of itching ; and lastly, *maculæ* or stains left on the affected part after the healing of the skin.

Now all these *lesions* may be present at successive periods on the same person and in the same disease,—for example, eczema ; and if we look at them a little more closely, we may see reason to divide them into two groups,—namely, such as are of earliest appearance, or *primary* ; and such as are subsequent, or *secondary*. For instance, the redness, the papule, the vesicle, and the pustule are primary ; while the swelling, the excoriation, the fissure or chap, the crusts, the scabs, the scales, the scratches, and the stains are secondary. But besides these lesions, which are all present in eczema, there are a few more which belong to other forms of disease, and therefore we shall assemble all that are usually recognized, under the two heads primary and secondary, and consider and describe them seriatim.

The *primary lesions* of the skin, or signs of a morbid state, are as follows :—

Rubor.	Pustula.	Tuberculum.
Papula.	Bulla.	Tuber.
Vesicula.	Squama.	Macula.

And the *secondary lesions* :—

Tumefaction.	Chap.	Desquamation.
Excoriation.	Ulcer.	Discoloration.
Scratch.	Crust.	Cicatrix.

RUBOR, OR REDNESS, is the state of colour of the skin produced by the abnormal distension of its vessels with blood. It may be simply *functional* and uncomplicated with any change in the vessels themselves, or it may be *structural* and depend upon a permanent state of enlargement, or hypertrophy of the vessels, or alteration in their coats. Functional redness may be present as a mere transient blush, or physio-

logical hyperæmia, or it may represent many degrees of intensity of pathological hyperæmia and constitute an exanthema or an erythema. Structural redness, on the other hand, may be due to a permanent enlargement of the vessels of the skin, termed angeiectasia and vascular nævus; or it may result from lesion of the coats of the vessels and the escape of the blood into the parenchymatous tissue, as in purpura, and also in contusion of the skin.

Pathological redness also presents the phenomena, that it may subside without alteration of nutrition of the skin, as in some of the slighter forms of erythema, or it may induce a suspension of nutrition of the epidermis, and in this way give rise to exfoliation and desquamation of the cuticle; or it may be associated with exudation and hypernutrition of the cell-structure, causing thickening; or, finally, it may become chronic and accompany the secondary series of morbid processes, and be in itself a secondary lesion. You remember, gentlemen, that it was upon redness that Willan founded his definition of *exanthema*, or *rash*,—namely, that it consists “of red patches on the skin, variously figured, in general confluent, and diffused irregularly over the body, leaving interstices of a natural colour.” In this definition, however, it is clear that Willan had in his mind the rash accompanying the exanthematous fevers,—namely, rubeola, scarlatina, and variola.

If we incline to seek for examples of the several forms of pathological redness which we have enumerated, we shall find as illustrations of hyperæmia subsiding without secondary changes, erythema, urticaria, and roseola; suspended nutrition of epidermis resulting in exfoliation is seen in the exanthematic fevers; and suspended nutrition of the epidermis with hypernutrition of the cell-tissue or exudation, in eczema; eczema may also be taken as indicating a hyperæmia of a chronic character, and belonging to the group of secondary rather than of primary lesions.

Redness, therefore, is an important sign of cutaneous disease, and betokens either an excess of blood in the skin or an escape of blood from the vessels. The excess of blood may be physiological or pathological, and in the latter case it may be temporary, in consequence of resulting from undue action, or it may be permanent, from an alteration of structure in the part. Again, it will excite in our minds a varying degree of interest, according as it may be general or partial, of larger or smaller extent, of irregular or circumscribed figure, or as standing alone, or associated with other pathological signs or lesions, whether primary in their nature or secondary.

THE PAPULA or pimple is an elevation of the cutis, for the

most part conical, but sometimes semiglobular or flattened, minute in size, of a variable tint of redness, generally accompanied with itching, and commonly succeeded by a thin scale. We will ask you to bear in mind the definition of papula given by Willan,—“a very small acuminate elevation, with an inflamed base, very seldom containing a fluid or suppurating, and commonly terminating in scurf.” If we seek further into the nature of a papula, we shall find that it has its seat at the aperture of one of the follicles, of the so-called pores, and that it is produced by hyperæmia of the vascular plexus of the follicle and exudation into the intervascular parenchyma. The degree of redness of the papula will bear relation to the extent of hyperæmia, and its bulk to the amount of exudation. You must satisfy yourselves, at the first opportunity, of the exact seat of the papula, and the knowledge you will thereby acquire will help you very materially in comprehending the pathology of the skin. With careful scrutiny you will discover the aperture of the follicle at the extreme summit of the papula, and you will find the summit to be transparent, from the presence of a conical plug of epidermis which normally occupies the dermal entrance of the follicle. Rayer and others pricked the summit of the papula under the expectation of finding an explanation of this transparency in the presence of fluid; but they were naturally disappointed, having mistaken the cause of the appearance.

Besides its conical or semiglobular or flattened figure, we have to note, in connexion with papula, the disturbance of innervation to which it gives rise and the consequent pruritus. The papula is remarkable for its pruritic tendencies, but we are unable to say with any certainty whether the itching is due to pressure on the filaments of the terminal nervous plexus by the hypertrophied cells of the parenchyma, or to absorption, by the nerves themselves, of the exuded fluid of the vessels, or of the excreted fluid of the cells. In a few instances the papula subsides to the normal level of the skin without desquamation; more frequently the morbid action of the tissues determines an arrest of nutrition and the consequent exfoliation of the cuticle covering the summit of the cone, while, in not a few instances, the itching provokes scratching, by which the summit of the papula is torn off, and a scab is produced, either through the discharge resulting from excretion by the over-distended cells, or from the escape of a minute drop of blood, the exudation in both instances desiccating by evaporation on the summit of the papule. The duration of an individual papule ranges from a few hours to one or two or more days.

As redness is the type of the exanthemata and the erythemata, so prominence is the type of the *papulæ* or papular affections, and especially of lichen. We need not stop here to inquire by what perversion of signification the term lichen, meaning literally a tree moss, has become symbolized by a papula of the cortex of man; but we shall do well to accept it as a fact. By lichen we understand a papular eruption, and we have other examples of a papular eruption in strophulus and prurigo. If we go back to the illustration of cutaneous disease which we selected as a standard of comparison—namely eczema—we shall find *papulæ* to be a constant element of that eruption, and sometimes a most conspicuous symptom, as in the variety which we term eczema papulosum and also eczema lichenodes; and the papule of eczema is true to the characteristics of its family stock, the papules are minute, they are conical, hard to the touch, and extremely pruritic. Strophulus is a papulous eruption occurring in infants, and the pimples are larger than the typical papula; they are frequently rounded at the summit instead of being conical, and they have an amount of redness and exudation around their base greater than is met with in the typical lichen. The *papulæ* of lichen planus are remarkable for their flattened and depressed summit, while those of prurigo are remarkable for the extreme degree of pruritus by which they are accompanied; they are often not perceptible until the pruritus has excited scratching, and the scratching has, as it were, called them into being, and they are especially distinguished by the small black scab resulting from exuded blood that crowns their summit after they have been violently torn with the nails. There is another papule which is remarkable for a tingling itching, which is larger than the papule of simple lichen, which has the pale hue of the tubercles of urticaria after it has been scratched, and which, like the papule of prurigo, is followed by a small black scab: this is an eruption of children, and is termed lichen urticatus. Then we find in our catalogue of *papulæ*, the minute papules of rubeola and scarlatina; the papules of variola, hard and gritty at first, and afterwards undergoing development into vesicles and pustules; the papules of syphilosis, distinguished by their dull-red colour and the absence of pruritus; the papules of gutta rosacea, and the large follicular papules of acne and sycosis, together with other forms of *papulæ* dependent on accumulations in the follicles of cellular exuviæ or sebaceous substance; on hypertrophy of connective tissue, as in the instance of achrochordon, or on hypertrophy of papillæ, as in verruca.

If, therefore, we proceed to sum up the special characters

of a papule, we shall find them comprehended in a consideration of its size, figure, colour, seat, symptoms, and decline. Its *size* ranges between a line and two lines, or, maybe, three—that is, a quarter of an inch: the latter would be esteemed a very large papule, verging on a tubercle, and our measurements of the papulæ of cutis anserina give a diameter of half to three-quarters of a line; while in height it averages about a line. Its *figure* is, for the most part, conical, sometimes globose, and sometimes flattened or depressed in the centre, as in lichen planus. Its *colour* varies from white to red, and from red to its deeper tints, reaching even to the confines of purple and livid; the white colour is seen in lichen urticatus, the bright-red in lichen simplex, and its purple and livid hues in lichen lividus. The *seat* of the papule is very obviously the aperture of the follicle, and from the follicular plexus it derives its colour and its prominence. Its most characteristic symptom is pruritus, and its decline is accompanied with the separation of the circle of cuticle which originally formed the covering of its summit.

The papule, which we have just been describing, might be called the papula of Willan, or the hyperæmic papule; for we need not remind you that the term pimple is commonly employed in a more universal sense. According to Hebra, a papula is “a solid projection above the surface,” consequent on “any morbid change in the skin,” and presenting a size varying between that of “a millet-seed and a lentil, and containing no fluid.” In reference to *size*, he names the papulæ *miliares*, *miliiformes*, and *lenticulares*; and in point of *figure*, he treats of them as being *acutæ*, *planæ*, *conicæ*, and *globosæ*. These words of Hebra remind us of the use which we sometimes make of seeds and coins as a comparison of size. Thus, there are the millet-seed; the mustard-seed, black and white; the hemp-seed; the lentil; the pea; the bean; and several kinds of nuts, of eggs, and of fruit; besides the coins in common use, the smaller and the larger silver pieces, and the copper pieces. But who amongst us can form anything more than an approximate guess of the size of an object from the use of such terms? who has determined by experiment that the size of the black mustard-seed is about half a line in diameter; the millet-seed, one line; the white mustard-seed, a line and a half; the hemp-seed, two lines; the split pea, about three lines, that is, a quarter of an inch; the lentil, more than a quarter of an inch; the four-penny piece, more than half an inch; the sixpenny piece, three quarters of an inch; the shilling piece, one inch; and so on? We know how easily we can be deceived in the size

of objects ; and, therefore, we advise you, very seriously, in your essay to distinguish size, to have recourse to fractions of an inch, be they lines or eighths, in preference to the before-mentioned objects. When Hebra speaks of *papulæ miliares*, we may understand papules having the diameter of a line ; but when he mentions *papulæ lenticulares*, we hesitate to accept the comparison, because the lentil measures more than a quarter of a line in breadth, and prominences having such a bulk we should at once designate as tubercles.

Hebra also reminds us that the range of signification of the word papule, or pimple, is much more extensive than our definition is calculated to admit. For example, besides the common papula produced by exudation, whether in the follicles or in the papillæ, there are the prominences resulting from muscular spasm, constituting *cutis anserina* ; accumulations of cellular exuviæ in the follicles ; accumulations of sebaceous matter in the follicles ; abnormal structure of the sebaceous gland, by Hebra termed “ degeneration,” while we should call it arrest of development ; hypertrophy of papillæ ; and hyperplasia, or new formation of papillæ ; to which he further adds, hæmorrhage into the rete mucosum, and illustrates this state by reference to Willan’s lichen lividus,—an evident mistake, since the lichen lividus of Willan is nothing more than purple and livid *papulæ*. It is well, however, that we should remember that the word pimple has a general meaning in addition to its specific and technical signification.

THE VESICULA is a prominence of the epidermis containing an aqueous fluid, of minute size and variable shape, being sometimes conical in figure, more frequently semiglobular, and sometimes flattened or depressed. Willan defines it as “ a small orbicular elevation of the cuticle, containing lymph, which is sometimes clear and colourless, but often opaque, and whitish or pearl-coloured ; and succeeded either by scurf or by a laminated scab.” The average range of size of a vesicle is half a line to two lines, and its height somewhat less than the breadth of its base. A vesicle three lines in diameter, that is, of the bulk of a small pea, must be regarded as of large size ; and if it be larger, we should term it *phlyctæna* and *phlyctis*, or, following the Latin phraseology, *bullula* and *bullæ*. The vesicles of the smallest kind are those of eczema ; namely, about half a line in diameter ; those of miliaria are as large, and generally larger than a millet-seed, the diameter of the latter being one line ; then above these we have the large vesicles, the almost *phlyctænæ* of herpes, as large as moderately-sized peas, measuring two and three lines in diameter, and leading upwards to the *bullæ* of pemphigus.

The pathological seat of the vesicle is the same as that of the punctum of hyperæmia or of the prominence of papula,—namely, the aperture of a follicle ; and when a vesicle increases in bulk it takes in one or more neighbouring pores. Its shape is governed by the degree of resistance afforded by the cuticle, and in some measure by the force of the exudation ; in the neighbourhood of the hair-follicles, the vesicle is semiglobular, sometimes irregular in outline, or angular, in accordance with the figure of the area of the lines of motion ; sometimes solitary, and sometimes clustered around the opening of the follicle like a row of beads. On the finer skin between the fingers, where there are no hairs and only perspiratory pores, and where the cuticle is thin and moist, the vesicles are conical in figure ; and under the same conditions, on the trunk of the body, and where the hyperæmic base is greater than between the fingers, the vesicles are semiglobular, as in miliaria. These same conditions, and especially the thinness of the cuticle, are the occasion of the brilliant transparency of the conical vesicles developed between the fingers in scabies, and, *par excellence*, of the hemispherical vesicles of miliaria. On the other hand, wherever the cuticle is thick and dense, as on the palm of the hands and the palmar surface of the fingers, the minute effusions of lymph fail in the power of lifting the epidermis into vesicles, but may be seen through the cuticle in the form of globular cavities, and where they are very numerous, they are apt to lift up the entire epidermis of the part ; for example, the whole of the palmar surface of an internodial portion of a finger, or a considerable extent of the palm of the hand. At other times, in consequence of the development of vesicles in great numbers, and often in clusters, they communicate with each other, and form beneath the cuticle multilocular spaces, sometimes of considerable extent ; vesicles, therefore, may be dispersed or scattered over the skin, when they are termed *discrete* ; or, they may be congregated in great numbers, so as to touch each other by their bases, when they are said to be *coherent* ; or, they may be still more closely packed and communicate by their cavities, when they are termed *confluent*. An eruption of eczema vesiculosum generally presents all these forms at the same time ; in miliaria the vesicles are nearly always discrete ; while in herpes, when the clusters are full, there is always some confluence of the matured vesicles.

A vesicle always makes its first appearance in the immediate circumference of a pore ; it may be on one or other side of the pore, or it may form part of a row which surrounds the pore ; or if, on the one hand, the pore be small—for example, that

of a sudoriparous duct,—or the vesicle itself be moderately large, the vesicle may cover the entire circumference of the pore. In the latter case the aperture of the pore may be seen on the summit of the vesicle; or it may be tilted to one or the other side; and sometimes, by its connection with the sheath of the follicle, it is held down in such a manner as to flatten the summit of the vesicle, or to give the summit an indented, or, as it is commonly termed, an umbilicated appearance.

It must be mentioned, also, that vesicles present some differences in their contents, having reference to their age: at their first appearance the fluid which they contain is limpid and transparent; in the course of a day it is lactescent and opaque, and at a later period it becomes yellowish. Pathologically it is an albuminous lymph, more or less tenacious and viscous, and its opalescence is due to the occurrence of changes in its composition which lead on to the production of pus, and convert the vesicle into a pustule. We have examples of these changes in eczema, which convert an eczema vesiculosum into an eczema pustulosum; we see it also in herpes, and still more strikingly in vaccinia and variola. In both the latter affections the first developed of the primary cutaneous lesions is redness; then follows a papula, hard and gritty to the touch; then a vesicula; and finally a pustule. In miliaria, on the other hand, the change is limited to opalescence, and scarcely ever runs on to the purulent stage. It must also not be forgotten that a vesicular eruption may be subjected to pressure or friction, and that such violence may result in disruption of the vessels of the derma, and the effusion of blood into the vesicles; in such a case the contained fluid may be pinkish or reddish, or even purplish or black in colour; but the nature of the vesicle remains the same, and this occurrence is only to be regarded in the light of an accident.

Older pathologists were wont to look upon the production of a vesicle as the consequence of a passive transudation of the fluid part of the blood from its vessels; but the distinguished Virchow and his school treat of it as a physiological operation of the cells. According to the former, the serous fluid was poured out upon the surface of the corium, and so lifted the epidermis in totality from off its basimentary bed; but, at the present day, and in conformity with the cell-theory, we look upon the transuded fluid as a product of the rete mucosum, absorbed from the tissues of the corium by the cells of the rete, and exuded from the latter at its surface, so as to break up the connexion of the mucous and horny layer of the epidermis, and lift up the latter in the form of a dome. It is also to the vital operations of the rete mucosum that we must

look for the explanation of the opalescence of the transparent lymph that first makes its appearance, and for the development of pus-globules and the conversion of the lymph into pus, as in some instances occurs.

In speaking of redness as a lesion of the skin, we had occasion to remark that hyperæmia was sometimes followed by exfoliation of the cuticle; the termination of papula is, in general, a thin scale corresponding in size with its inflamed base; but vesicula, as it combines with the hyperæmia of papula the production, besides, of a morbid secretion, gives rise to a more decided and thicker scale, and, in general, a *crust*. When a sudden outbreak of eczema vesiculosum, such as the eczema solare of Willan, quickly subsides, the contents of the vesicles are dispersed, partly by absorption and partly by evaporation, and the separated cuticle dries up into a thin scale, and is cast off in due season, of a size and thickness scarcely greater than that of papula, excepting in the instance of a coherent or confluent eruption, when the desquamation would be more extensive. Miliaria terminates in this way by a thin and almost inappreciable scale. But when the vesicle lasts longer, and runs through its opalescent to its pustular stage, it is apt, by the desiccation of itself and of its contents, to form a covering of considerable thickness, which is no longer a scale, but a scab or a crust. Such are the thick and hard scabs of herpes, firmly and deeply embedded in the skin, at first amber-coloured, then brown, and sometimes black; remaining apparent for a considerable time, and leaving cicatrized pits when they fall off. Of another kind is the crust formed by eczema, when it assumes a chronic character, and pours out a morbid secretion. In this instance it is not the vesicle which forms the crust, but the secretion exuded from the diseased surface. This secretion is partly serous and partly purulent, and, not unfrequently, it is discoloured with sanguineous effusions: hence the crust varies in consistence, in thickness, and in colour; it may be dense or friable; it may be thick and porous, or laminated; and it may be greyish, or brownish, or greenish, or yellow, reddish, or almost black. Crusts of this kind are met with on the face and scalp, in cases of ichorous and pustular eczema, and especially in eczema infantile, in that frightful-looking affection termed *crusta lactea*. But *crustæ* will form a theme for future consideration, as being one of the secondary lesions, and we allude to them here, partly in consequence of being a mode of termination of vesiculæ, and partly because we desire thus early to call your attention to the three words, scale, scab, and crust. *Scale* is the thinnest of the three, and may be the separated

cuticle alone, or the cuticle in conjunction with a thin varnish of desiccated albuminous secretion; *scab* is the desiccated vesicle, together with its contents, and sometimes includes a portion of the deeper tissues involved in destruction, as in herpes; while *crust*, however thick and hard, is superficial, and the consequence of the desiccation of morbid secretions. If you look to your dictionary, you will find that a *scale* is a thin lamina, anything that is exfoliated or desquamated; a *scab* is an incrustation formed over a sore by dried matter; and a *crust* is a collection of matter into a hard body.

THE NERVES OF THE SKIN IN HEALTH AND DISEASE. By JAMES MORRIS, M.D., Lond., Fellow of University College.

THE skin is largely supplied with nerves; but, looking upon it as an organ of special sense—the organ of feeling, this is only a fact analogous to the large size of the optic and auditory nerves in proportion to the surface on which they are distributed. What then is the function of all these fibres? The same—one and the same; the difference depends on the arrangements at their ends. It is trite to speak of the nerves as the telegraphs of the body, but their analogy with the electric wire is closer than is commonly supposed. There is but one kind of impression—call it vibration, polarity, what you will—which passes through the wires, but yet it will ring a bell, fire a gun, blow up a ship, transmit a message or a speech, or even transfer a signature or a rough sketch. That which passes along the telegraphic wires is a variety of motion; we call it electricity, but it may be made to appear as light, heat, magnetism, sound, chemical force, or common motion. All these are now recognized as varieties of motion.

There is no reason to suppose that anything passes along the nerves, whether motor or sensitive, but a form of motion, which, as it does not correspond to any of the above, though convertible with some of them, we name nervous force. It is a separate variety of force, correlated with the others, but its laws have yet to be investigated. Its rate of transmission is approximately known, and the velocity is small; it seems to require the nervous matter to be semifluid in order to pass: when the nerve is cooled, its function is deadened; when frozen, it is *nil*.

There are many others, but there is no better illustration of

the unity of effect on the same nerve-fibres, produced by the most different stimuli, than the "phosphene"—the moveable circle of light produced by touching the closed eyelid with the finger-nail, so as slightly to indent the eyeball. Light is the subtlest form of motion, and yet its grossest form produces in the optic nerve the same sensation.

It is well known that even the most sensitive parts of the skin have little accuracy or acuteness of sensation unless the perceived body or the sentient skin be moved, at least slightly,—unless the conditions be present which produce vibration.

Impressions on the cutaneous nerves may be painful by excess, pleasant or disagreeable by accordance or discordance, or by the association of ideas, as is the case with the other senses.

Some have wished to add to the sense of feeling, supplementary senses,—a muscular sense and a heat sense. The former is, I think, evidently a variety of ordinary feeling combined with unconscious memory. With regard to the latter, heat relaxes the organic muscular fibres of the skin and capillaries, causing a free movement of the blood, and this alone would give a peculiar sensation.

Besides, if the perception of impressions which cannot at present be shown to have a common character were a ground for establishing a new sense, we must at once admit patchouli, musk, and verbena senses, and so on *ad infinitum*. And now that the function of the eye and ear is shown to consist in transmitting to the brain intelligence of forms of motion, we need scarcely despair of coming to the same result with the inferior senses,—taste, smell, and the perception of heat.

The large number of nerves in the skin has sometimes been considered of importance with reference to the shock of burns and scalds of large surfaces. I think this an error, as the danger of shock is greater from injury to a small cardiac or other visceral branch than if the whole optic nerve, for example, be divided; and as to the various remoter effects of duodenal ulceration or visceral inflammation, &c., these have been lately, I think correctly, attributed to the passage into the circulation of blood-corpuscles damaged by heat, or minute portions of fibrine coagulated: the heat even of a scald is sufficient to produce this effect.

When we have put aside those cutaneous nerves which may be regarded as nerves of special sense, those which remain are perhaps not very much larger than those distributed to the mucous membranes. Among them are the motor nerves governing the organic muscular fibres of the skin; and lastly, probably most important of all in disease, those which contract

or expand the vessels, and, by ruling the flow of blood, determine the supply of nutrient matter, of oxygen, of alkali, and regulate to some extent the pressure under which the chemistry of the textures shall go on, and also the temperature of the skin, matters of evident importance in nutrition.

The skin is a wide disease-field, well cultivated, as the existence of THE JOURNAL OF CUTANEOUS MEDICINE sufficiently shows. When, in so wide a field, we have disease in dots, spots, blotches, or patches of endless variety of form, the questions rise in the mind, not only why have we disease of such a kind, but why is it situate exactly where it is and nowhere else? In some cases the answer is, we have here an irritation, friction, contact with caustic or dusty matters, sugar, flour, soot, alkalies, germinal matter, an acarus, or a fungus. Again, if a poison be present in the blood, heat may bring a larger share of it to any particular part by dilating its vessels. We often see this illustrated in the more developed eruption of an exanthem on any part of the body kept warmer than the rest. A curious instance occurred: a patient who had been exposed to the contagion of small-pox, was slightly scalded across the buttocks; he sickened, and the eruption was far more abundant on the scalded skin than on any other part of the body.

In the face of the fact that co-ordinative power is never so strikingly exemplified as in the embryo before nervous tissue is to be seen, it is too much to assert that no regulative power exists in the body independently of visible nerves. Still all our knowledge points to the nervous as the ruling system.

The nerves may determine the place of a diseased action, as they determine the occurrence of a healthy one: in crying they cause the lachrymal gland to blush; in sneezing, the cavities of the nose; in mastication, the salivary glands; in digestion, the stomach; and so forth: their influence in certain cases of skin disease is undoubted, and well illustrated in the case of herpes in the first number of this Journal, by Mr. Erasmus Wilson.

The nerves of the skin, by the feeling of pain, give *voice* to the complaint of internal organs, and, what is curious, by no means always the same nerve to the same organ; thus, acidity of the stomach, a decayed tooth, a foreign body anywhere, will give rise to pain there is no telling where. Why? I recur to an analogy I have used before. My readers probably know the piece of telegraphic apparatus called a "commutator." At first sight it is not a very intelligible contrivance, a mass of wood with moveable pieces of metal, and the wires radiate from it; the ganglionic cell always reminds me of it.

By its intervention, the electric current may be sent in an instant north, south, east, or west, by one or another wire ; and consequently its effects may be made as different as its destinations. One cannot look at Dr. Lionel Beale's plates of the caudate nerve-cells without feeling a probability that they may be commutators, though possibly having other uses. I do not know how the matter could be tested by experiment ; but if it be allowed to attribute a commutating function to these cells, whether in the brain, cord, or ganglia, directing a nervous impression hither or thither, phenomena of disease, and of health too, become explicable, which are not explicable without that supposition ; among them that of pain in the same cutaneous nerve from different irritants, and pain in different nerves from the same irritant.

When nerves are injured, there is apt to be altered nutrition in the area of their distribution. In the gunshot-wounds of the late war in the United States, with other effects, local coldness, burning pain, eczematous eruptions, ulcerations, loss of hair, and shiny skin, were observed. For a long time it has been my belief that bruising of the external popliteal or peroneal nerve causes, or rather let us say localizes, these and similar phenomena, which are so common on the skin of the leg and foot, where that nerve is distributed. Indeed, the whole area to which it gives branches, is a favourite habitat of disease ; for while ulcers, eczema, and lichen, with dark stains of the cutis, so often affect the outer side of the leg, its branches on the foot go to the usual seat of inflamed corns and gout.

The class of cases which have led me to the conclusion that the influence of the peroneal nerve is important, are cases of the above conditions of skin, chiefly on one leg only, occasionally with a distinct history of a blow on the neck of the fibula at the point where the nerve is so much in danger from projecting corners of benches or forms. Many patients give such a history under leading questions, but it is not easy to know when to attribute importance to it. In a few there was unusual tenderness of the nerve at that point, though the patients had no clear recollection of injury. But to my mind the most cogent evidence was from cases where a patient, quite healthy, or with very slight tendency to skin disease, having received a sharp blow, a few weeks later has had eruption or slight ulceration. The position of the nerve is very much exposed, so much so, that a painful degree of compression may be caused in a thin patient by merely sitting with the legs crossed. The case of the peroneal has this advantage, that the problem is not complicated by lymphatic glands lying upon

the nerve, and which might be enlarged and tender from the irritation below. I have reason to believe that it is no solitary case, but it presents facilities for study both post mortem and in the living patient, and I make use of this opportunity of drawing attention to the matter on the part of those who have special facilities to investigate it. In the hope that these remarks may interest some readers, I lay down the quill.

ON STRIÆ ET MACULÆ ATROPHICÆ CUTIS, OR
FALSE CICATRICES OF THE SKIN. By ERASMUS
WILSON, F.R.S.

MOST medical men are familiar with those gaps in the skin, those pseudo-cicatrices which result from over-distension of the integument, and a giving way, or partial tear of the corium, and which are consequent on pregnancy, ascites, and obesity. They are usually unperceived in their active stage, and are first noticed when they appear in the form of cicatrix-looking lines, gently curved, a quarter of an inch to half an inch in breadth, and an inch to three or four inches in length. In this state they are smooth and glistening, very slightly depressed below the level of the surrounding surface, sometimes of a pearly whiteness, sometimes pinkish, and sometimes bluish; the coloured tints proceeding from a semi-transparency, resulting from the thinning of the fibrous tissue of the corium, which permits of the shining through of the arterial and the venous hues of the blood.

If we observe these lines at their earliest period, we shall find, as might be anticipated, some symptoms accompanying the violence done to the corium; but the symptoms, redness, and pain, are slight, in consequence of the gradual nature of the process of injury. The redness is a pinkish stria, resulting from hyperæmia, but generally unaccompanied with fission or exfoliation of the epidermis. The pain is a moderate amount of pruritus, sometimes of tightness or soreness.

The direction of the lines bears relation to the axis of the force, and to the configuration of the surface. In pregnancy the lines are most numerous on the lower half of the abdomen; the greater number occupy a transverse position, while some have a longitudinal direction, curving upwards from the groins upon the lower segment of the distended globe; and a similar disposition of the striæ is met with on the mammæ.

The agency which is here at work in producing disruption

of the corium is an enlargement or distension operating from within, and which may be compared to the effects of excessive inflation of an india-rubber bag; the bag yields in a certain degree, and then gives way at the weaker places. In the corium this violence is accompanied with hyperæmia and followed by exhausted nutritive power and atrophy.

When the distension ceases, or the agent of distension is withdrawn, as in parturition or a removal of the fat in polysarcia, the overdistended skin is incapable of resuming its normal state from loss of elasticity; it continues more or less uneven and corrugated, and the marks of the torn corium remain for ever after, as cicatrices, denoting a foregone injury and consequent loss of substance or atrophy; hence the term *striæ atrophicæ*, and the expression *linear atrophy*.

In the days when every white or black mark of the skin was denominated *vitaligo*, the *striæ atrophicæ* at present under consideration fell into the same category. Joseph Frank, a nosologist of the early part of this century, defines *vitaligo* as a “*macula, sive alba sive nigra, plerumque cum cutis in parte depressione, læsaque plus minus illius functione.*” Furthermore, Frank adopts the signification of *vitaligo* given by Rudolph Vogel in 1764, “*nomen vitiliginis, a vitio derivatum videtur;*” a derivation with which we by no means agree. The cause of the affection, says Frank, is “*quidquid cellulosam telam sub cute delere, destruere, ac pellem arctius cum carne aut ossibus connectere, aut naturalem hujus involucris contextum in se ipsum contrahere et sanguinis nervorumque influxu plus minus privare potest;*” while to other and more special causes he adds, “*distensiones validæ cutis, e. c. ad abdomen a graviditate, ab ascite, a pinguedine dispulsis.*” And he divides his subject into *vitaligo nævum*, *leprosam*, *cicatricem*, et in *vitaligo matrum*, *hydropicorum*, et *obesorum*. Moreover, he advances the argument that *vitaligo matrum* may be taken to be a more or less certain proof of the progress of pregnancy, and especially as a sign of concealed parturition, “*inter indicia plus minus secunda prægressi ac forte occultati partûs pertineat.*”

Under the head of cicatrices of the skin, Rayer remarks, that “the effects of great distension of the skin ought to be distinguished from cicatrices. When for instance the *mammæ* have been excessively distended during the period of nursing, and after women have suckled several children, the skin covering them is intersected with irregular lines and wrinkled angular spaces of a brighter white than the rest of the integuments. These, as I have satisfied myself by dissection, are owing to a separation and deformity of the tissue of the corion,

become thinner and less transparent. Individuals who are extremely corpulent, who are, or have been affected with ascites, and women who have had families, have the skin of the abdomen seamed with these white lines, which run in all directions, but especially transversely."

But none of the early writers have alluded to any other cause of the *striæ atrophicæ* than over-distension; and none have described any other form of *striæ* than those already mentioned. Nevertheless, there exist other causes and other forms, and to both of these we wish to draw attention. The cases at present under consideration may be termed *traumatic*, inasmuch as that they result from forcible distension and a forcible disruption of healthy tissue; but there are others which we must regard as *idiopathic*, seeing that the pressure is not excessive, and yet the same results follow as would be produced by considerable force; in this latter series, we have to deal with a weak tissue operated upon by a moderate degree of pressure or friction, or both conjoined, such as that of two masses of adipose tissue which have a slight degree of motion between them; or it may be merely a state of hyperæmia consequent on the normal movements of the skin, and followed by absorption of tissue. Lastly, there is another form of *striæ atrophicæ* which results from paralysis of a cutaneous nerve, and is therefore of neurotic origin. We therefore propose to arrange the varieties of linear atrophy of the skin into three groups; namely, *striæ atrophicæ traumaticæ*, *striæ atrophicæ idiopathicæ*, and *striæ atrophicæ neuroticæ*.

The *STRIÆ ATROPHICÆ TRAUMATICÆ* have been already, in a measure, discussed. They comprehend the forms distinguished by Joseph Frank, and, in accordance with the views of that author, we may name them: *striæ atrophicæ matrum*, *hydropicorum*, and *obesorum*. We must, however, mark certain differences between these three kinds of causes,—namely, that the two first are rapid in their operation, and the last more gradual and progressive. And, in reference to the last, we may well inquire of ourselves, why it is that the growth of the skin does not proceed *pari passu* with the hyperplasia of the adipose tissue. That it does not do so is quite evident; and in this latter fact we perceive that there is a want of harmony between the nutritive vigour of the containing and the contained parts. It is simple to comprehend in what manner excessive distension may bring about disruption of the fibrous web of the corium; but we shall not unfrequently meet with cases in which *striæ atrophicæ* are present in an integument of normal conformation, and in which there is no undue accumulation of fat. Again, it may

happen that causes of debility have been the occasion of the collapse and defective nutrition of the skin, and that subsequently, with a recovery of health, the adipose tissue may return to the integument. In such a case, the fat, in moderate proportions, acting against a weakened tissue, may give rise to the same results as those which follow excessive accumulation. We may mention a case in point. A young lady, after a confinement in which she lost a great quantity of blood, was extremely exhausted and debilitated. By great care her life was preserved, and she began to gain a little strength. With a return of strength the subcutaneous fat reappeared, and consequent upon its increase, with greater rapidity than the restoration of the nutritive power of the skin, the corium gave way in many places, chiefly on the limbs, and became marked with well-defined and extensive *striæ atrophicæ*. It is clear, therefore, that it is not sufficient to depend for our explanation of the phenomenon upon distension alone, but that we must also take into the argument the state of vigour of the skin itself. A very moderate distension of a weakly organ will occasion the same results as an excessive degree of pressure against an organ of average resisting power.

The *STRIÆ ATROPHICÆ NEUROTICÆ* are lines in the skin corresponding with the course of a cutaneous nerve, such as the supraorbital, and produced by atrophy of the tissue of the corium consequent on paralysis of the nerve. We have recorded a case of this kind in the fifth edition of our *DISEASES OF THE SKIN*, page 404, the main features of that case being as follows:—A lad of 17, while flushed with excitement, perceived on the reddened skin of the forehead a white line which followed the course of the supraorbital nerve from the inner extremity of the eyebrow to the vertex of the head. A few years afterwards, the skin in the course of that line became anæsthetic and atrophied; and a similar disorganization on the side of the root of the nose and on the ala nasi showed that the nasal, as well as the frontal, nerve was involved in the injury. Another case, which has undergone spontaneous cure, but has left an atrophic groove upon the forehead resembling the scar of a sword-wound, was, in its details, briefly as follows:—A young gentleman, aged 17, of nervous temperament and weakly constitution, suffered severely from frequent attacks of catarrh, and occasionally with hay asthma and violent sneezings. On the morning following an unusually prolonged fit of sneezing, he observed a white streak crossing his forehead in the direction of the supraorbital nerve. The streak, by degrees, became insensible and attenuated, and ended, finally, in the permanent fissure-

looking groove already mentioned, which twelve years later resembled the mark left by a sword-wound of the skin.

The STRIÆ ATROPHICÆ IDIOPATHICÆ, however, present features of interest greater even than the two preceding groups: they are identical in appearance with the lineæ traumaticæ, but appear silently and without apparent cause, although they are nevertheless associated with other indications of feeble vitality of the cutaneous tissues. Joseph Frank's observation that the striæ traumaticæ may be taken as signs of a foregone pregnancy lose their importance when it is shown that similar marks are met with on the abdomen of the male as well as of the female, and in the absence of any immoderate degree of obesity, and that they are also met with around the mammæ of the unimpregnated female, on the shoulders, on the hips, and on other regions of the body. Dr. Wilks describes these striæ atrophicæ in the Guy's Hospital Reports for 1861, and records examples in which the affection occurred in young persons as early as thirteen years of age. They appear, he says, "as if an elliptical portion of skin had been excised, and its place refilled by a substance of a softer material. Thus, these marks feel softer than the surrounding skin, and the finger can be placed in them, and indent them. For the same reason, they swell up if the limb is made to contract, so as to bring the edges nearer together. They all appear to present a transverse position, whether on the limbs or on the body." One of the cases was a nervous, sensitive, hysterical girl of eighteen; the striæ were dispersed over the body and limbs, but mostly on the legs. Thus, on one hip there were three; three or four around the knees; several upon the instep, and one on the shoulder. Another case was a lad of nineteen, under treatment by Mr. Bryant for disease of the knee-joint. In him the striæ were confined to the legs, the chief being situated above the knee, and a few on the dorsum of the foot. A drawing illustrating this curious affection accompanies the paper, and exhibits six hollow cicatrices, crossing the lower part of the thigh and knee, and resembling the scars of long gashes through the integument. In both cases the affection made its first appearance at the age of thirteen.

Our attention is especially drawn to this subject at the present time, by a case to which we were recently called in consultation with Mr. Nunn, and concerning which Mr. Nunn has been good enough to furnish us with the following notes:—"The young lady is aged 14; she was never strong, but since the commencement of menstruation is still more delicate. Last year she was attacked with chicken-pox; subsequently

menstruation was suspended for five months, during which time she had incessant diarrhœa; but on the return of the periods the diarrhœa ceased. The *marks* appeared four months ago, during the prevalence of the diarrhœa; they were pale when first observed; at present they have a pinkish hue; and they are situated on the convexity of the lower prominence of a double curvature of the spine, of which the patient is the subject." It requires only to be added to Mr. Nunn's narrative, that, in the situation referred to, there are nine slightly-curved cicatrix-looking lines, having the concavity of the curve directed upwards; the lines are about a quarter of an inch in breadth, and one to two inches in length, and are unattended with any inconvenience. There exists also one similar line on the opposite side of the spine, and one or two on the thighs, in the neighbourhood of the knees.

In a case of double morphœa, morphœa alba et nigra, occurring in a young lady, aged 21, and born in India, we found on the hips ten or twelve white stripes, looking like the cicatrices observed on the abdomen after pregnancy. These stripes began in the creases of the skin, between the buttock and the thigh, and spread, like the rays of a fan, upwards towards the front of the thigh, following the creases of the integument. They were white, slightly raised like wheals, covered by a glazed and altered cuticle, and exactly resembled, in texture and appearance, the cicatrices met with on the abdomen after pregnancy. When pressed with the finger, it was evident that they corresponded with a fissure which extended through the entire substance of the subcutaneous tissue; that in the course of this line the whole of the fat was removed, and the sensation conveyed to the finger was that of a fissure or rent in the fatty tissue.

In another case, a lady aged 28, and otherwise in good health, there were about ten striæ on the front of the right shoulder, some below the mammæ, and a few on the hips. Those on the shoulder took the direction of the fibres of the clavicular portion of the deltoïd muscle, the curve being directed towards the prominence of the shoulder. The lady was in moderate adipose condition, and had never been endowed with an excess of tegumentary fat. Her attention was first drawn to the principal seat of the disorder, about four years previously, by a sensation of tenderness or soreness to the touch; and from time to time she has experienced a feeling of tightness or weight in the part; a feeling as though the part were tied down by a string. There is no similar appearance on the left shoulder.

But we have recently met with another form of the spontaneous or false cicatrix of the skin which we cannot term *stria*, because it was neither a streak nor was it elongated; it was round or oval in figure, measuring about a quarter to half an inch in diameter, and in the case in question was dispersed over the limbs and central region of the back, along the course of the spine. The patient, a gentleman aged 26, called our attention to numerous glazed spots, which scarcely differed in colour from the surrounding integument, and were uniform in level with the rest of the skin. On pressing the surrounding integument, the spots immediately assumed the appearance of deep pits, covered by a thin cicatrix-looking layer, that became corrugated by the pressure. It was evident that the normal tissue of the skin was gone, and that these round and oval spots corresponded in structure with the *striæ atrophicæ*. They first made their appearance at the age of twenty, had progressively increased in number, and gave rise to a sensation of slight itching. The gentleman himself was pallid and thin, and the skin unhealthily nourished; he had passed two years in the West Indies; had suffered from dyspepsia, from disorder of the liver and spleen, and also from syphilis. And it is not improbable that these *maculæ atrophicæ* may have corresponded with spots of syphilitic congestion of the skin. There had been no tubercles and no ulceration.

The *diagnosis* of *striæ atrophicæ* is so very clear as to make it stand out in strong relief from other affections, and particularly affections of its own class,—namely, *maculæ*. The disease is an atrophy of the skin, assuming a linear direction, or, as expressed by Dr. Wilks, a “linear atrophy.” Its prominent character is its resemblance to a cicatrix, without foregone solution of continuity, or alteration of structure; and its pathological state is identical with that of the cicatrix of an ulcer. There is loss of substance of the corium, loss of subcutaneous adipose tissue, loss of the papillary layer of the derma, of its vessels and its nerves, and a consequent smooth and unmoulded epidermis. The *striæ neuroticæ* present some slight differences from this description,—namely, in the absence of the thinned cicatrix; the line being more firm and condensed, and having more the character of a simple scar. The distinction of *traumatic* and *idiopathic* is also not without its interest. The traumatic form is confined to the part where the distension exists; the idiopathic, besides its independence of distension, is dispersed over various regions of the body, and is commonly associated with nutritive disorder of the skin in other situations, or with constitutional debility. In one of the cases above mentioned it was present with *morphœa*, an

analogous affection; in another there existed a cacotrophic, and possibly a strumous diathesis. Mr. Bryant's case was accompanied with disease of the knee-joint; and Dr. Wilks's case occurred in a nervous, sensitive, and hysterical girl.

The *cause* of the idiopathic affection is a cacotrophia cutis; whether of constitutional or local origin. And its *prognosis* is uncertain; we cannot hope that the organic mischief will be repaired; but we may hope to restore the tone and powers of the constitution by appropriate means; on our capability of effecting this object must rest the chances of reparation and cure.

The *treatment* applicable to the disorder must be determined according to its position in one or other of the preceding groups. In the neurotic affection, a tonic stimulant treatment is demanded; in the traumatic affection, local support and the use of emollients; while the idiopathic form will require a treatment adapted to the state of the constitution as well as a locally stimulating plan. Constitutionally, in addition to ordinary tonic regimen and medicines, we may employ arsenic; while locally, ablutions with the juniper tar soap and cold water, the shower-bath, and the sponge-bath, are useful; together with frictions with the aconite liniment moderately diluted.

ON THE TREATMENT OF LUPUS. By J. L. MILTON, Surgeon to St. John's Hospital for Diseases of the Skin.

THE first step towards forming trustworthy conclusions as to the power of any remedies over the progress of disease must be to separate them; the second, to examine their action separately. All knowledge otherwise acquired must ever be to a great extent empirical; treatment based on such knowledge must remain an affair of individual experience; and teaching based on this kind of treatment is as insecure as the pyramid which, poised on its apex, waits only for a breath to overthrow it. Industry may add to the bulk and polish of the fabric, but cannot make it more lasting, and the labour of a lifetime may at any moment be sacrificed to the popularity of some new specific.

One of the first results to be predicted from such a process would be the simplifying of our pharmacopœia, and certainly a greater boon could not be conferred on medicine. What we want is not new drugs, but a more complete knowledge of the

power, *both positive and relative*, of the more valuable remedies we already possess, and along with this the ruthless elimination of a host of useless drugs which at present only serve to encumber the druggist's shop and the author's pages, to puzzle the brains of those who have not had the ill-luck to use them and excite the disgust of those who have.

Take the treatment of diseases of the skin for instance. There are very many simple affections of this class for which more drugs have been recommended within the last ten years than any person could examine in twice the time, and there is scarcely one common affection for which several totally different but equally successful modes of treatment have not been recommended. Those who have examined the answers to correspondents in some of our journals must have noticed that it is not an uncommon thing for a writer to ask what will cure some particular disease, such as acne or pityriasis, for instance, as though specifics were as numerous as maladies. It is seldom that he has to wait long for an answer, but he may wait a long time before two persons will suggest the same mode of treatment; indeed it would almost seem as if every person who considered himself able to advise upon the subject differed on this head more or less from every other person.

There must be something radically wrong in our modes of observation when men arrive at conclusions so opposed to each other. Disease is ever the same, and the quality of drugs can be defined with such certainty as to form a fixed basis of calculation. Now, there are but three elements in the question—the disease, the remedy, and the observation bestowed upon them. Then, as two of these three are, so to speak, fixed and invariable quantities, error can only take its being from the third.

There is no need to travel out of the path to seek for instances of this disparity of opinion. The literature of lupus, like that of any other obstinate disease, will afford examples of every variety of conclusion. It is, according to the opinion of some surgeons, as nearly incurable as any disease can well be, while others consider such a gloomy view as utterly untenable. Some writers look upon medicines as useless and caustics as invaluable, while others rely upon medicines as being alone of service and denounce the use of caustics as wanton cruelty. I need scarcely say that both cannot be right.

It may save some misunderstanding if I admit beforehand that my own observations, though I hope carefully made, are still very far from what observations should be; but it appears to me that the cause of truth will be better served by stating

even very imperfect results than by falling back upon authorities who can be consulted at first hand, or by attempting to lay down general rules which the reader can do equally well for himself. Nor are they brought forward with the view of throwing any discredit upon the system generally adopted, which, whatever may be its imperfections, has certainly achieved wonderful results, and is entitled to the lasting gratitude of mankind. They are offered simply as a contribution towards a mode of recording facts, which, if the writer's view be correct, might come in course of time to be as exact as the records of an observatory, and perhaps as widely separated from the usual method as those are from the rough-and-ready guess of the farmer or sailor. The latter may be as useful in its way—may, up to the present time, have led to more valuable results—that is not the point at issue; the question is which system will in the end yield the most certain deductions.

Notwithstanding the gloomy views held by some writers as to the power of any treatment over lupus, I think it will be found that most cases can be cured. The eating form and the variety which appears on the limbs, unconnected with disease of the face, are for the most part manageable enough. In some persons, apparently of extremely healthy frame, and who might pass for models of good constitution, the creeping variety seems to resist almost any kind of treatment, while the same disease in a much more severe form, in much less healthy persons, and under much more unfavourable circumstances, will get rapidly and perhaps permanently well. It is quite possible that in some of these instances the secret of the obstinacy lay to some extent in their own neglect; it is often very difficult to draw reliable conclusions except with respect to in-door patients, and many of these patients cannot leave their employment in order to enter a hospital, be the disease ever so severe. But after giving full weight to this argument, there was yet in some cases such a wide disparity between the results of the same treatment in different persons, all attending with equal regularity and all seemingly paying equally strict attention to what might promote a cure, that it really seemed as if high health and a small extent of diseased surface only tended to make the malady more intractable. In conclusion I may say that the erythematous form and the scrofulous proved on all occasions very obstinate.

The internal remedies for lupus may, I think, be very safely divided into three classes,—those which possess a certain amount of value, those of very doubtful value, and those of no value at all.

The only remedies which I have observed to possess an undoubted control over lupus, and which will, I believe, in every case effect a certain amount of good, and in a certain proportion of cases bring about a cure, are arsenic and calomel in lupus of the face, and iodide of potassium in lupus of the limbs. Of course, there may be others, some known, some to be yet found out; I am limiting myself here strictly to facts which I have been able to verify.

Among the remedies of doubtful value I would put all the salts of barium, antimony, soda, mercury, iodine, and potass, with the exception of those in the first class; all combinations of salts of these, such as iodide of mercury, Donovan's solution, &c.; all the oils, such as cod-liver oil; and all vegetable preparations whatsoever. In ranking these remedies as doubtful, I do not in any way seek to invalidate the conclusions formed by some writers as to their power over lupus; our knowledge of them may be as yet in its infancy;—for instance, with respect to the chloride of barium, which Dr. Frazer, a most careful observer, has seen cure lupus of the limbs. What I mean is this, were any given number of cases of lupus put before a surgeon, he would not be able to say that *with these remedies only* he could rely upon curing a certain proportion of them, or perhaps a single case. The disease is often benefited for a certain time and to a certain extent by some of them,—for instance, iodine and iodide of potassium in lupus of the face; but in all the cases I have seen the amendment was very slight, and soon came to a standstill. M. Devergie treated twenty-six cases in this way for three months, and not one of them was cured. Cod-liver oil too produces often a degree of improvement, but it is equally uncertain. I would always give it as an auxiliary, but would never rely upon it to the exclusion of curative means.

Among remedies of no value, I think, we may safely rank steel, quinine, mineral acids, bitters, sedatives, alteratives, and sudorifics, change of air, sea-bathing, baths of every kind, and possibly many of the preparations naturally falling into the second class. This may seem going too far; I can only say that I see no other conclusion to be drawn, as I never noticed any beneficial change in the lupus produced by any one of these remedies. For instance, I have notes of several cases in which iron was prescribed sometimes by myself, sometimes by others. Among the preparations used were the tincture of the hydrochlorate, the magnetic oxide, the iodide, the sulphate, and the freshly prepared carbonate, made by mixing solution of the sulphate with solution of carbonate of potass, Griffith's mixture, &c. In no one instance did any of those prepara-

tions exert the slightest appreciable influence over the disease. Sometimes the health underwent a certain degree of improvement, but generally there is not much to improve. In the same way when mineral acids, such as the nitric or nitro-muriatic, were given, the appetite became more keen, and possibly, were the whole community treated in this way, a certain number out of every thousand would exhibit the same results; indeed it would be folly to dispute their power in promoting *the health*, their value as *auxiliaries*; but as to the influence of these remedies *over the disease*, they are, for anything seen to the contrary, as capable of producing as of alleviating it.

Change of air and sea-bathing are often recommended in this complaint, as they would be recommended for the results of over-work, anxiety, and confined air; for beginning mischief in the brain, or the lingering mischief of bronchitis. Yet it has nothing in common with any of them. It pursues its relentless course with equal severity on open plains and crowded alleys, among the hills of Cumberland and in the bracing air of the east coast, in the dry, bright climate of France, and the perpetual drizzle of Ireland or West Scotland, and often rages with greater severity in the place the patient is sent to than in that which he has left. Under such circumstances only a very sanguine mind could look for benefit. Benefit may, it is true, follow change of air, but so may a very decided relapse; and the circumstances which determine either have not yet been so far elucidated as to enable us to say more than that it is a hazardous step.

With very few exceptions the external applications recommended in *lupus* are useless and impracticable. For instance, soothing or cooling, antiphlogistic or alterative dressings, ointments and lotions, leeches, &c., are, I believe, perfectly useless. Were they continued for a lifetime, it is very doubtful if they would ever check the march of the ulceration. Again, all remedies strong enough to give severe pain, such as chloride of zinc, Vienna paste, Canquoin paste, are and ever must be inapplicable, for the simple reason that, however valuable they may be, a very large number of patients will never suffer them to be used; others having once submitted will never allow a second trial to be made, and a third class will only consent when it is too late to prevent irremediable deformity. As to whether they effect a cure or not when they have fair play, that is beside the question; the difficulty is getting them fair play; and whatever may be said in their favour, I apprehend their use will always be restricted to a small proportion of cases, principally among patients not very susceptible of pain, or unusually resolute in bearing it, and not

easily deterred by failure or relapse,—for both will occur ; or where one small solitary part is invaded by the disease.

For the purposes of treatment, all cases of lupus may, I think, be advantageously divided into two great groups ; one embracing lupus of the limbs only ; the other lupus of the face and head, complicated or not by affection of the limbs. The arrangement is, I admit, extremely unscientific ; but there is reason to think it will prove effectual in examining the action of medicines, the varying power of which over different structures, and even the same structure in different parts, has not yet attracted the attention which, I think, it might fairly claim. Some years ago I endeavoured to call attention to this subject, and attempted, by a series of proofs, to show that medicines which are invaluable in a simple inflammation of one structure are powerless against the same affection in another ; thus, for instance, opium acts most beneficially in peritonitis, and inflammation of the subcutaneous cellular tissue is often promptly checked by the free use of large doses of tartar emetic, yet this salt seems to exert no influence over peritonitis, while inflammation of the cellular tissue is only controlled by it in so far as the pain is relieved. Again, the very same inflammation in different mucous membranes, as is seen in ophthalmia and urethritis, may run a widely different course, and be very differently affected by the very same remedial measures. It would lead the reader too far out of his way, were I to detail all the statements upon which this view is based. It must suffice to point out the general principle and to draw attention as far as possible to it, because it offers a nucleus for future observations, around which other facts may accrete, as crystals form round a nucleus.

So far as I have been able to observe, the most efficient remedy against lupus of the limbs is iodide of potassium. I am not speaking here of tertiary ulceration, but of that form which is often confounded with it—obscure lupoid ulceration, unconnected with syphilis or lupus of the face. For the most part, it only requires to be given in very moderate doses, and the necessity which exists in syphilitic cases for prescribing large quantities and steadily raising the amount given, does not obtain here. In general, a drachm weekly is quite enough at first, and it is seldom necessary to go beyond twice this amount. When it cures the disease, I believe it always acts soon, and the action goes on till the part is healed. When the improvement comes to a standstill, I am disposed to think that augmenting the dose will have no effect.

As to the mode of giving it, that may be safely left to the discretion of the surgeon. Perhaps one of the bitter infusions

will answer as well as anything. One precaution should never be omitted,—that of getting the salt from a source where we can rely upon having it pure. It is not, perhaps, so much adulterated now as it used to be; indeed, I have been told, upon very good authority, that the adulteration rarely exceeds ten per cent., though, judging from the great difference in the action of prescriptions made up at different places, I should have considered this statement below the mark. Still even an admixture of ten per cent. may make a very material difference.

Should the bowels be confined, a mild pill may be given; in fact, in this as in any other complaint, all complications should, as far as possible, be swept away, care being taken at the same time not to interfere with the action of the iodide; for instance, in giving aperients, the alterative action of mercury should be guarded against. But I should think it was quite unnecessary to enter into details upon such a point; to keep on repeating that when gout is present colchicum combined with salines may be prescribed, and that iron is called for in anæmia; that impaired digestion and painful menstruation must be relieved; that we must attend to the general health and improve the secretions;—every surgeon knows, or ought to know, all this.

When we have to deal with lupus of the head or face, I believe the first remedy to be given is arsenic. Unless some disorder of the health, such as loss of appetite, great weakness, or anæmia is present, all preparatory treatment is, I think, wasted; but when the tongue is coated and marked by the teeth, the breath foul, the bowels confined, and the appetite bad, a saline may be given for a few days, followed by nitric acid in bitters. The only question worth considering is the mode of giving the mineral and the dose suited to the case in hand. As to the mode of giving it, I believe that most of those who have tried De Valangin's solution (*liquor acidi arseniosi hydrochloridi*), consider it one of the best preparations ever invented, possibly superior even to the old Fowler's solution. Twelve minims may be given three times a day, with the food or directly after. It should be taken regularly, and the dose should always be measured out in a glass measure. Should this dose produce no disturbance of the stomach or bowels, no nausea or headache, no languor, or irritation of the skin, it may be brought gradually up to about sixty, or in a very few cases seventy minims daily. The former quantity is generally quite enough, as the medicine has to be continued for a long time. Perhaps simple water is as good a vehicle as could be devised; but so long as the efficacy of the arsenic is

not interfered with by the addition of alkalies, mercury, or iodine,—so long as what is given with it can be given for a long time without any injury to the health—it may be prescribed in any form ; but the simpler the better.

But though it will perhaps always effect a certain degree of improvement, it can scarcely be relied upon in a certain percentage of cases for producing a radical cure of lupus. It has been vaunted as a specific for the eating variety. I can only say that I cannot confirm the view. So long as the improvement seems to progress, however slowly, it would not be wise to interfere with it ; it will often cure single-handed, and we thus sweep away one more complication from treatment ; but so soon as the amendment comes to a standstill, so soon as ever a sufficient time has elapsed to form a valid reason for believing that it is really doing no good, and still more, so soon as ever there is a threatening of relapse, the use of mercury should, I think, at once be resorted to. I know of no remedy which so quickly checks the spread of lupus as calomel. With it I have repeatedly arrested a sudden outbreak in a patient actually under the influence of arsenic ; and what is more, the same result has occurred in the hands of others, who have thus been led to the same conclusion as myself. The fact has been so often noticed by the patients themselves, that so far from dreading the continued use of mercury, they are often more anxious to take it than I am to prescribe it, although I have never yet seen any harm ensue from the proper employment of this remedy.

It may be given in the form of a pill, mixed with any substance likely to lessen the griping and pinching pain which it may cause in a few cases. A grain or two will, as a rule, be enough to begin upon ; but as in the majority of cases this dose speedily loses its effect, it will in such cases be necessary to raise it at the end of a week or two. On the average this quantity does not require to be often increased, and then not largely. From two to three or four grains may in general be considered the outside limit, but no certain rule can be laid down. The only sure test is its purgative action : two, three, or four loose stools should follow each dose, and when this does not ensue, a saline aperient, such as the effervescing citrate of magnesia, a vegetable aperient like senna, or what is perhaps the best, a compound like black draught, may be given the morning after ; and a compound can be used, because the object here is not to investigate the action of either senna or magnesia, but to assist the action of the calomel, which is being investigated. With proper care there should be no action on the gums ; but if any set in, mercury should be

given up, and only the draught prescribed till this symptom has passed off. To prevent all needless repetition, it may be said here that these directions hold strictly good with respect to giving calomel for lupus of the limbs, except that it is generally less often called for and for a shorter time.

When there is a large open surface, the liquor plumbi may be used. The fluid should first of all be warmed, by placing it over hot water, and so soon as it begins to smoke it should be painted several times over the surface. What is left had better be thrown away. It ought to be applied at least once daily, all crusts and exudations being previously removed, and if the patient thinks any relief is obtained from its more frequent use, then let it be used more frequently. I am indebted to some of my correspondents—Dr. Hinds, of Birmingham and others—for information about its value, and I am disposed, from several trials I have made, to think very favourably of the remedy. Mr. Erasmus Wilson recommends it in lupus erythematosus * and in scrofuloderma.†

The acid nitrate of mercury is a very valuable remedy. When its use is restricted to small surfaces, to tubercles and to patches in which the morbid action has been a good deal subdued, or which are healing, but so slowly as to justify a resort to any means which will hasten the process, it is often of great service. With proper care, the pain attending its employment is so trifling as to constitute no valid objection. It should at first be brushed very lightly over the part, and a basin of water should be at hand to bathe the surface with immediately ; but familiarity soon breeds contempt here, and the patients generally cease to avail themselves of the chance of washing the acid away. The application should be repeated daily, both because the crust which is thus formed constitutes an almost impregnable barrier against the impact of the air, but also because the acid acts more painlessly than when only occasionally laid on. How it acts I do not profess to understand,—possibly by coagulating the albumen in the epidermis or the blood. Subsequent dressing (except in the eating form, when water dressing may be used) is, I think, superfluous; the principal thing is to protect the surface from the air, especially cold, raw east winds, under the malignant agency of which lupus will sometimes relapse in a few hours as much as has been gained in a week ; indeed, as far as possible, I should say the patient ought to be confined to the house. Dr. Gilchrist, of Torquay, gave me the particulars of a case

* "Diseases of the Skin," fifth edition, p. 343.

† "Diseases of the Skin," sixth edition, p. 427.

in which a lupoid ulceration of the nose was cured apparently solely by excluding the air.

For cases intermediate in severity between those which are suited for the liquor plumbi and those which require the acid nitrate of mercury, I should say the nitrate of silver is one of the best. At the beginning I would suggest a very sparing use of it in solution, not more than ten grains to an ounce. This quantity, however, may be *rapidly increased*, and after a few applications, the solid nitrate may be resorted to. Dr. Purdon, in a valuable communication which he has favoured me with, states that he gives the patient chloroform and then bores the nitrate deep down below the surface of the ulcer. His treatment seems to have been very successful. It is also a favourite remedy with Hebra, Dr. Alexander Anderson, and many others.

To my thinking, a lupoid surface should only be washed with very hot water, and when soap is used it should be of the most unirritating kind that can be procured. The diet ought to be good, and fat ought to enter largely into it. Where fresh fat meat cannot be borne, I would suggest the daily use of mild bacon or ham for breakfast. Too much meat is as injurious as too little; about half a pound a day for an adult has always seemed to me enough. Too much beef tea, jelly, or strong soup, like over-feeding, seems to me to overtask the digestion without aiding the nutrition, and this mistake is more than any other to be particularly guarded against when the patient is taking tonics. From any ale—except pale ale—I have never seen any good come; but a free allowance of beer, or, where it can be procured, good port wine, is invaluable. By far the best stimulant, however, is, I think, pure old rum given in milk, which possibly supplies something deficient in the nutrition.

The results of this treatment have been even more satisfactory than when I brought forward the subject last year.* So far as all the inquiries I could make have yielded any response, it is to the effect that only two cases have relapsed, and in both cases the patients did their very best, not only to bring about a relapse, but to aggravate it to the very utmost; whereas in three of the cases, then to some extent doubtful, a perfect cure has, according, at least, to the reports of the patients themselves, taken place; and one which seemed hopeless had, when last seen, greatly improved. Other cases have gone on equally satisfactorily, which want of space will not allow me to dwell further upon.

* "On the Treatment of Lupus." London: R. Hardwicke.

ON VARIOLOID. By R. S. Sisson, M.D.

THE following cases of modified small-pox, being examples of several which I have seen during the three months of the present year, 1867, appear to me not less instructive than interesting. For although it is well known that small-pox presents greater varieties than any other of the exanthemata, yet there can be no doubt whatever that the true nature of this disease is frequently overlooked by the inexperienced, owing to the extremely modified form in which some cases occur.

A lad, aged 17, presented himself at the Royal General Dispensary, Feb. 16th. The face and wrists are spotted with bright red papules, distinctly "shotty" to feel. Has been vaccinated; feels perfectly well, and has not felt otherwise. Small-pox has appeared amongst his fellow warehousemen. Ordered to go home, keep the house, and send for medical assistance if he grew worse.

He again presented himself on the 20th. The only remains of the preceding eruption are two desiccated vesicles on the face. All the other papules have disappeared, as he said, "without ripening." He continued to feel perfectly well.

March 21st.—I was sent for to see a young gentleman in my neighbourhood, aged 15. There is a bright red blush on the face, forehead, and wrists, covered—the latter thickly—with elevated papules; the tongue is white, the fauces considerably injected, and the tonsils slightly enlarged. The patient does not admit of having felt at all indisposed; but the gentleman with whom he lives had noticed that he had been "off his appetite" for a few days. Marks of vaccination faint.

22nd.—The eruption is disappearing; the lower extremities are thickly covered with elevated papules.

24th.—Eruption has almost entirely disappeared. The tongue, however, remains white, pulse weak, and the boy looks pale and languid.

27th.—A few stains on the thighs are the only remains of the eruption. The patient is gaining strength.

Remarks.—In all cases which I have seen similar to the above, the prodromata were so slight, that it was difficult to elicit from the patient that there had been any at all. From this, some would infer that the disease was chicken-pox. There are, however, several important differences between them. The eruption of chicken-pox comes out after twenty-four hours'

illness. In varioloid, the illness preceding the eruption is at least two days, where it can be detected. The eruption of chicken-pox appears on any part of the body; and according to Trousseau, the spots on the first day do not exceed from ten to fifteen. In varioloid the eruption is orderly, and the spots frequently innumerable.

In chicken-pox, tension of the skin causes the papule to disappear (Gee, "Reynolds's System of Medicine"); in varioloid the opposite obtains.

Between lichen and the papular form of varioloid, the diagnosis is sometimes not easy. The chief points of distinction are that the former appears generally in hot weather, occupies by preference the outer surface of the limbs, and is accompanied by troublesome itching.

ON ACNE AND ITS TREATMENT. By MARRIS WILSON, M.D.

PURSUING the design adopted in my former communication of registering particular forms of treatment, whenever such forms appeared to offer new and unusual facilities for relief, either systematic or empirical, I bring under notice a few more special methods such as I find them recorded. Before concluding my task, it will be necessary to glance generally at the present means employed in treating this disease. The *Medical Times* of 1859 contains a notice of Dr. Rodet, who recommends the following ointment as serviceable in all the forms of acne. It is composed of—Washed lard, 50 parts; sublimed sulphur, tannin, of each 4 parts; laurel-water, 5 parts. The proportions of sulphur and tannin are to be increased, according to circumstances, to 6 or 8 parts. The author, however, throws a doubt over the special fitness of this treatment, when in a succeeding paragraph, the same ointment is advised for sycosis, an affection of the hair system, so different in cause and situation from the disease of the sebiparous system, and so widely separated by modern classification. For sycosis the ointment is prescribed after the inflammation has been attacked and the crusts detached.

In the same journal is presented the treatment advised by M. Ferrat, extracted from the *Bulletin de Thérapeutique*, 1859, which very closely resembles that reported in my former paper, as pursued by M. Hardy, at a later date, in the wards of the Hospital Saint-Louis. When the affection is in its earlier stages, and the attack not severe, and after all the

causes which appeared to maintain it have been removed, the treatment is to be commenced by the application of spirituous lotions, either tepid or hot; a teaspoonful of the following solution being added to a glass of tepid water, and applied night and morning :—

℞ Hydrarg. bichloridi, 1 part; alcohol q. s. ad solvend.; aquæ distillatæ, 100 parts. Misce.

M. Ferrat declares that certain forms of acne, especially the punctated, and one obscurely designated sebaceous, may be certainly cured by the application of astringents locally, and advises the use of alum and peroxide of iron, in the following formula, increasing their strength when necessary :—

℞ Aluminis, 30 parts; aquæ, 300 parts. Misce. To be used as a lotion night and morning.

℞ Ferri peroxidi, 1 part; Axungiæ, 60 parts. Misce. To be applied at bedtime.

When the case is more severe, protiodide of mercury is to be substituted for the iron, increasing the dose according to circumstances, to double the strength. Should the cure be long delayed, or imperfect, the biniodide is to be employed instead; and if the attack be very intense, then the biniodide is to be used in the first instance.

I am not sure if my investigations have led, even in a small degree, to the fulfilment of the expectation entertained in the commencement of my undertaking, namely, that of promoting speed and facility in the cure of acne; but it is quite certain that many proposals for treatment have presented themselves to me, clearly of an opposite character. To the plan, which I cannot resist detailing below, on account of its amazing redundancy, I can hardly apply a stronger opinion than that it is simply a project of treatment, for it must appear very doubtful if any unhappy patient could be found willing to submit to its practical application. However, it is put forward as a mode of cure, and it shall speak for itself. At the same time I do not feel inclined to make myself responsible for the definition of the forms of disease named, more particularly as they seem to apply rather to gutta rosacea and syphiloderma.

In the *Gazette Médicale de Paris* for 1862, Dr. Hedenus of Dresden, giving clinical instruction “*sur l’acne rosea*,” meaning thereby *red nose*, says that all the world knows that acne is one of the diseases most rebellious to treatment. His mode of practice, for simple redness of the nose, commences by the following medicine, administered internally :—

℞ Carbonate of soda, ℥iiss. ; to be dissolved in eau de melisse, ℥vj. ; add extract of orange-peel, ℥iv. ; and take three spoonfuls every day.

As an external application, to smear over the surface of the nose, the following is to be used :—Laudanum, 47 drops, mixed with 4 grains of extract of belladonna. The nose is to be well washed in the morning, and small pieces of linen dipped in cold water are to be applied several times a day. When this has been pursued for some time, the following pills are to be taken, eight or ten of them, twice a day ; the formula is :—

℞ Sodæ bicarbon, ℥v. ; Pulvis rhei, ℥iiss. ; Ipecacuan., gr. iij. ; Extracti coloc. co., gr. xv. ; Extracti chelidon., maj. q. s. M. Fiant pilul. xciv.

If the patient be not relieved at the end of six months, then a mineral alkaline water should be tried, such as the baths of Marienbad or of Homburg ; and this treatment, if necessary, is to be continued during three years.

If the redness depend in any degree upon a scrofulous diathesis, whey mixed with vegetable juices, muriatic baths, &c., will prove serviceable, while, as an external remedy, the following ointment is to be applied :—

℞ Axungiæ, ℥iss ; Zinci sulphatis, gr. ij. ; Extr. Thebaicæ, aquos., gr. iv. ; Extract. conii, gr. viij. M. To be spread upon linen and applied alternately with cold fomentations.

During the winter a spoonful of a mixture is to be taken three times a day, compounded of muriate of baryta, and essence of hemlock, dissolved in cherry-laurel water. At the same time one of the following lotions is to be used for external application :—Solution of acetate of lead, laudanum, tincture of benzoin, alcohol, and elder-flower water ; or, solution of lead, acetate of ammonia, and water.

During the summer time the waters of Ems in particular are to be used.

If the cause of the *red nose* depends on menstrual or hæmorrhoidal disorder, foot-baths containing nitric acid, and frequent applications of derivatives to the inferior extremities, are useful as external means, while the pulp of potato or scraped carrot may be applied directly to the nose.

At the same time there are to be taken in the morning two spoonfuls of an electuary, composed of agrostis, taraxacum, chelidonium, and millefolium, with a glass of Seltzer water.

The reporter, Dr. Goeschen, exclaims :—“ This complicated

medication, in which are seen to figure so many remedies, and the mineral or thermal waters of Marienbad, Carlsbad, Homburg, Ems, &c., is appropriate for an affection designated by the author as *simple red nose*, *acne rosea*.

Now let us examine the mode of treatment advised for *acne rosacea*, *la couperose*. I must not, however, enter upon so much detail, for the sake of space, as in the previous case, and it will be enough to sketch the plan proposed loosely.

In the first place a liniment, composed of extract of belladonna, extract of opium, ointment of nitrate of mercury, and olive-oil, is to be spread upon the affected parts, by the aid of a pencil or small piece of linen, and allowed to remain for half an hour. If this prove unsuccessful, a strong solution of corrosive sublimate is to be applied for a quarter of an hour two or three times a day, after the plan of Hebra. While this is being used, a very efficacious remedy—muriate of zinc, muriatic acid, and water—is to be taken internally as a mixture; or the muriate of zinc may be taken with extract of myrrh and extract of guaiacum, in the form of pills, according to circumstances. In case the liver should become very irritable under this treatment, cod-liver oil is to be given in large doses, up to nine spoonfuls a day, while the same oil is to be applied externally.

Dr. Hedenus also recommends iodide of potass, combined with extract of hemlock, in progressive doses, commencing with 2 grains twice a day, increased every day by 1 grain, until a dose of 16 grains twice a day is reached, and then the quantity is to be diminished in the same progression until the original dose is attained. As a local application, ointment of corrosive sublimate is to be applied on linen during the night.

Should all these means fail, it is advised to commence afresh with the baths, a few new localities being added to those above; such as Töplitz and Aix-la-Chapelle, taking at the same time pills composed of crude antimony, extract of walnut, and powder of bitter-sweet, and spreading upon the skin, with a camel-hair pencil, a liniment of oxydulated acetate of mercury, glycerine with starch, recent butter of cacao, and oil of almonds well mixed together.

Such is the plan advocated by Dr. Hedenus; but he appears still to have considerable doubt as to its sufficiency; and thus, after all these medicines, mineral baths, and years of medication may have proved unsuccessful in curing the disease, I think I cannot be rash in adopting the *dictum* that *acne*, regarded from this point of view, is really “one of the diseases most rebellious to treatment.”

The treatment of the most recent time is of a very systematic character, and designed to correct constitutional disarrangement. Its principle is most concisely set out in Mr. Erasmus Wilson's *Student's Book of Cutaneous Medicine*, and consists in regulating the functions of digestion and secretion, by bitters, mineral acids, and chalybeates, and by employing the ferro-arsenical solution in special conditions of nutritive debility. The torpid and weakened tone of the skin is to be remedied by hypochloride of sulphur ointment, rubbed upon the eruption at bedtime, followed next morning by thorough washing with soap and water. Bichloride of mercury dissolved in spirits of wine, or bitter almond emulsion, preceded by juniper-tar soap and water, is another valuable remedy recommended by the same author.

MISCELLANEOUS CASES AND COMMENTARIES. By
JONATHAN HUTCHINSON, F.R.C.S., Surgeon to the London
Hospital and Lecturer on Surgery, Surgeon to the London
Hospital for Diseases of the Skin, and Assistant Surgeon
to the Royal Ophthalmic Hospital.

I.—*Remarks on Xeroderma and Ichthyosis, and the mutual relations of their various forms.*

WE have, of late years, much simplified our knowledge of the group of diseases to which the term Ichthyosis is applicable. The discovery that in a certain number of cases the crust consists of sebaceous secretion, and sebaceous secretion only (Ichth. sebacea, seu spuria) was a great step in advance. Another step consisted in the observation that the term "congenital" has been much too liberally applied in reference to this disease; the clinical fact being that although ichthyosis very usually begins in early life, it is scarcely ever congenital, and that even if a certain dryness of skin is observed in infancy, the more characteristic conditions are always produced later. Recent writers have, as it seems to me, drawn the distinction between sebaceous ichthyosis and what is called true ichthyosis (or epidermic) a little too definitely. My own impression is that these two forms are after all differences rather in degree than in kind, and that both these and the more mild condition known as Xeroderma are modifications of one and the same tendency. The essential cause of them all is probably functional disorder of the sebaceous follicles generally. These follicles secrete an altered product which does not

lubricate the skin, and which instead of facilitating the detachment of the epidermis in due course of exfoliation, glues the scales together, and thus produces a crust. When a certain amount of adherent crust has formed, another pathological element is often added. I allude to the growth beneath this protecting covering of the vascular papillæ. These papillæ shoot up through the epidermis, and prolong themselves into the lower layers of the scab; hence the bleeding which usually occurs if the crusts of ichthyosis hystrix be roughly detached. Any one who will carefully examine the patches of true ichthyosis by detaching the crusts and looking at the surface thus exposed, may satisfy himself of the truth of this description. The crust itself is not, as might perhaps have been suspected, itself a papillary growth, but consists of epidermic scales and sebaceous material mixed, and beneath it elongated papillæ like those of soft warts will be found. When I speak of ichthyosis hystrix, I refer to cases resembling the portrait published by Hebra* under that name, and that given by Alibert, and since copied by many other authors. The "hystrix" or "porcupine" feature is one which varies greatly in degree in different cases, and also on different parts of the same skin. Whenever the crusts are very thick and very dry, then the resemblance to spines is increased. I cannot too strongly express my conviction that we apply this term to extreme and exaggerated examples of a disease which in milder forms is very common, and is usually designated by other names. Thus many forms of pityriasis occurring in young persons, and all those known as xeroderma, are essentially examples of the same morbid tendency, which if further developed would produce the grotesque features of ichthyosis hystrix.

II.—*A case of general Xeroderma, with symmetrical patches of Ichthyosis hystrix.*

Charlotte Wood, æt. 8, was admitted at the Skin Hospital, May 17, 1867. The skin over the whole of her trunk was harsh and dry, and the sebaceous follicles everywhere conspicuous and large. The first appearance of roughness of the skin was noticed a few months after birth, and was attributed to vaccination. She was rather thin, her skin brown, her hair of a light brown, and her complexion florid. She had always enjoyed good health. The condition of her skin gave

* Copied by the New Sydenham Society. Plate V.

her little inconvenience, but she was said to perspire little even on taking exercise. In most parts the skin affection was that of xeroderma, but in parts that of ichthyosis. The palms of the hands and the soles of the feet were quite healthy, as were also the backs of the hands and the fingers. Near the shoulders, both above and also in the axillæ, the scaliness was very considerable, and also on the hips and outer sides of the thighs. The patches deserving the name of ichthyosis hystrix were however found only on the lower extremities, and chiefly in front of each knee. In this situation was a patch as large as the palm of the hand, and there were others on the outer sides of the knees over the tendons of the biceps muscles, and others much smaller on the dorsum of the feet and toes. The face was very slightly scaly, and the neck not much more so. On all the parts the diseased conditions were arranged with the most accurate symmetry. Where the patches were most developed I scraped off with a knife the dry crusts. They were for the most part detached with moderate ease, and without causing the skin to bleed. The skin beneath, however, was rough and showed elevated papillæ, much like those of minute warts, which on further scratching easily bled.

We may note in this case that the parts of skin most exposed to the air were those which showed least of the disease. The position of the patches was very similar to that of common psoriasis.

III.—*General Xeroderma in two sisters, with patches of skin approaching in character to Ichthyosis hystrix.*

Two sisters, R. & F. Blanc, æt. 11 and 9. Attended on March 1, 1867.

They were both in good health, of brown complexion, florid, resembling their mother in temperament, who stated that before her marriage she had suffered from scaly patches on her legs, for which she was for several years under treatment.

The conditions in both of the girls were very similar, but more severe in the younger one. The skin in all parts was harsh and covered with branny desquamation. The sebaceous follicles were conspicuous in all parts, and in many they were slightly enlarged. The backs of both patients were much affected. In the younger one the condition at the borders of the axillæ passed into that of slight ichthyosis, *i. e.*, the epidermic scales adhered in small conical elevations. On the face the skin was merely dry and slightly branny. Both com-

plained of the skin itching at times. The mother reported that the younger child perspired very freely ; so much so that she had consulted a medical man about it. The other child also perspired quite sufficiently. It was thus clear that the perspiratory glands were not involved in disease.

As in the preceding case, the parts about the axilla and shoulders were more affected than others. A portrait, showing the state of the axilla of the youngest girl, has been preserved in our museum.

IV.—*Psoriasis Palmaris in connection with Inherited Syphilis.*

After the infantile period skin diseases, as the result of inherited syphilis, are, according to my experience, very rare indeed. When once the child has got rid of the general rash which usually occurs during the first six months of life, it is very seldom that any other cutaneous affection shows itself. I have carefully examined a very large number of young persons, at or about the age of puberty, when syphilitic keratitis is common, who were undoubtedly the subjects of inherited taint, and have scarcely ever found them suffering from any chronic skin disease. The following case is therefore worth a note :—

A young lady, aged 20, was brought to me by her medical attendant, on account of interstitial keratitis. Her teeth were characteristic and I had no hesitation in believing her the subject of inherited syphilis. I was told that for three years past she had been at times under Mr. Startin's care, on account of troublesome "*psoriasis palmaris*." This fact supplied further confirmation to my diagnosis, since this disease is well recognized as a frequent result of a remote taint of syphilis.

V.—*Case in which Erythema multiforme seu annulare (Herpes Iris of writers) recurred repeatedly during three years.*

I have never had an opportunity of seeing so marked an example of "*Herpes Iris*" as was shown in the case I am about to describe, and it seems to me well worthy of detailed record. My thanks are due to my friends, Mr. Stirling and Mr. Lathbury, for kindly bringing the patient under my observation.

Alfred Clark, æt. 5, of brown complexion, always quite robust when free from the rash. He came under my notice

in March of the present year (brought by Mr. Lathbury, of Tabernacle Walk), during his fourth attack of the eruption, which had then been out for about two months. The attack had begun by a single patch on the right arm, which for three weeks was his only one, then numerous others came out. Mr. Lathbury had attended him during several of the previous attacks, and to him I was indebted for many of the facts concerning their history.

His first attack was at the age of two years. He was very ill—confined to bed for several weeks. His illness was most severe before the eruption came much out; when the spots were well developed he was able to walk about, but had lost much flesh.

A second attack was a year later, and not nearly so severe as the first. He did not keep his bed. The rash remained out a month or five weeks.

Last summer (1866) he had a third attack (not very severe).

His fourth attack—the one in which I saw him—was more severe than either of the last two, but not so much so as the first.

The rash on every occasion has been of the same kind. He has always been peevish, feeble, and ill in the beginning of the attack, and gained in health as the patches disappeared. Season has not appeared to influence him, for no two of the attacks have been at the same period of the year. No skin diseases have been observed in the family. The relatives are all healthy; no history of any special maladies.

It has always been noticed, when the patches began to fade, that they disappeared very quickly indeed; they would sometimes vanish wholly in a day or two. A good deal of irritation and burning has usually attended the eruption.

As regards the position of the patches, they have usually been rudely symmetrical, covering the trunk and extremities, but never passing either to the hands or feet, nor ever affecting the face. He has had very large ones on the shoulders and arms. Between the attacks he regains his health perfectly.

Description of the Eruption.—Each patch was stated to have commenced as a red point, which rapidly enlarged into a papule or wheal. From wheals the patches enlarged to the size of shillings or pennies, and some were now even much larger.

When I saw him, the patches were very conspicuous indeed, and presented red surfaces, with abrupt raised margins of a lighter tint. These margins at first sight looked much like rings of small vesicles (*herpes circinatus*), but when touched

were found to be solid. In the centre of each patch there was a small circle, varying in size from a split pea in some to a fourpenny-piece in others, which was of lighter tint than the rest, and thus produced some resemblance to the conditions depicted in our atlases as "Herpes Iris." Some of the patches had vividly red margins, but most of them had margins as I have described, of lighter tint than the rest. In all cases slight stretching of the skin by the fingers made the swollen margins at once quite pale, just as happens with the wheals of urticaria. They became bloodless and pale long before the adjacent skin did so. None of the patches were in the least scaly, and only one, which had been scratched, showed any kind of crust. The changes were merely those of congestion and slight parenchymatous effusion.

As to Diagnosis.—The eruption might by a careless observer have been mistaken for ringworm, the roundness and ringed character of the patches resembling that disease. The entire absence of desquamation, and the vivid red colour, however, at once put aside this supposition; and the history was also most conclusive. There could be no doubt that the disease was really an example of what most writers have meant by Herpes circinatus and Herpes Iris; though many authors have confused true ringworm with these much more rare affections.

Progress of the Case.—Mr. Burgess at once set to work on a portrait of the boy's shoulders and arms, and has produced a very accurate and beautiful one, which is now in our Museum. The disease, however, had evidently reached its acme, and it changed too rapidly to permit of the state first shown being depicted in the portrait. The patches had become much less bright in colour within a day or two, and the innermost circle, which had looked a little pale at first, very quickly began to desquamate, a delicate layer of epidermis peeling off. In ten days the patches had lost their definite borders, and in another week only dusky stains remained. It should be stated that I prescribed arsenic on the first day, but it is very doubtful whether this had anything to do with the rapid disappearance of the rash, as the boy's father said that it had often vanished in the same sudden manner before. The boy improved in health, whilst the rash was fading.

VI.—General Remarks on *Erythema multiforme*.

We are indebted to Hebra for a valuable simplification of our knowledge of the diseases known as *Erythema tubercu-*

latum, papulatum, circinatum, annulatum, iris, &c. Recognizing the clinical truth that these varieties are very closely allied, whilst they present such great differences in appearance, Hebra has proposed that they should be all grouped together under the appropriate name of Erythema multiforme. It is possible that Erythema nodosum might also be suitably included. At any rate it is most desirable that the term Herpes in application to any of them should fall into disuse. The terms Erythema annulare and E. Iris had, I believe, been already used by Mr. Wilson in preference to that of Herpes. In the great majority of cases there are no vesicles, and though we may admit that now and then a ring of vesicles may be seen, yet the disease only proves yet further its claim to the title Multiforme; but does not establish one to that of Herpes. In all essential features it still conforms to the type of Erythema, and differs widely from that of true Herpes.

The diseases associated together as Erythema multiforme present some remarkable and very interesting features. They occur without known cause, come out suddenly, are symmetrically placed, are attended by a certain degree of febrile disturbance, may occur at any age, have a limited but uncertain duration (rarely so long as a month), and disappear spontaneously and completely. In most cases no recurrence takes place, but this is a point well worth further investigation. They show a remarkable preference for certain positions, thus E. papulatum and its near allies is always seen on the backs of the hands (Hebra), E. nodosum always in the fronts of the legs, both may and often do affect other parts, but they never omit these. All prefer the young.

When these forms of Erythema show tendency to recurrence, as in the case I have given, then they seem to prove their relationship to the other relapsing diseases (pemphigus, psoriasis, &c.), but in most other cases, and perhaps in these also, their relationship with urticaria is much more close.

The next case is unique in my own experience, and I believe also that it is unique as far as the published records of Erythema cases yet show. It illustrates most remarkably the appropriateness of the designation "*multiform*" to this disease. The patient, whilst presenting the most typical condition of Erythema papulatum on his hands and arms, had large erythema patches, symmetrically placed on his cheeks, upon which copious vesications showed themselves. No case could exhibit more clearly the absurdity of trusting to any one pathological result for the classification of skin diseases. We had vesicles and bullæ, yet the disease in reality was neither herpes, eczema, pemphigus, nor erysipelas, but true Erythema.

That it was such, was proved by its history, by its symmetry, by the existence of typical erythema on other parts, and by its spontaneous disappearance. A good portrait of the boy has been preserved in our Museum, and I shall have much pleasure in showing it to any one interested in the subject.

VII.—*Case of Erythema multiforme which had recurred many times during fifteen years, and which on some parts developed vesications.*

Charles Slynn, aged 15, a fairly healthy lad, presented himself on Monday, April 19th, amongst my patients at the Ophthalmic Hospital. His case was, however, one of purely dermatological interest, and I transferred him to the Skin Hospital. Both his cheeks were covered by large confluent patches of erythema papulatum quite symmetrically placed, and presenting vesications in many parts. The patches were of a very vivid red, and abruptly circumscribed; they did not pit on pressure. The redness disappeared when the skin was stretched. The vesications were from the size of pins' heads to that of peas, and were quite transparent, much resembling those of erysipelas. On the upper lip and chin were some isolated clear vesicles, without any surrounding erythema, and much resembling those of herpes. On the backs of both hands and both wrists was a copious eruption of papulate erythema without any vesications whatever. The lad stated that the eruption on his face had first appeared on the morning of the previous day, and that on his hands twelve hours later. Two days ago he had been in good health, and quite free from rash. He complained of feeling feverish and ill.

My clinical assistant, Mr. Tay, obtained from the lad and his mother the following history of his previous attacks. At the age of three weeks he was vaccinated, and a fortnight afterwards a general blush of redness came out all over him. He had then no vesications. Since then he has been liable to the eruption on his hands and face once or twice every year. Some years it would occur only once, and in some three or four times. During the first ten years it chiefly affected the face, but latterly it has affected the hands also. On one occasion only (a month ago) did any blebs show themselves on his hands. The eruption has always been of very transitory duration; that on his hands lasting only a few days, that on his face never more than three weeks. On his cheeks, after the vesication, the epidermis always peels, but this is rarely the case on the hands.

The attack during which I saw him went through the same course as the former ones. As the rash had rapidly appeared, so it very rapidly vanished. During the two days following his application, the vesications greatly increased in size, until some of them were as large as the halves of cherries, and after that they dried up, and the congestion of the skin faded away. In the course of a week both hands and face were well, and he was again in usual health.

VIII.—*Outbreak of a large crop of Pigment Moles. Remarks as to possible connection with Melanosis.*

Miss —, aged about 22, was sent to me on account of a large crop of pigment moles which had made their appearance. She had upwards of twenty on her face, and she assured me that she had counted sixty of them on one arm. Most of them were very small, not larger than two or three pins' heads; but being very black, they were conspicuous. The largest were as large as peas.

There is nothing unusual in the congenital occurrence of many small moles; but the feature of peculiarity in this case was that they had all appeared long since birth, and were still multiplying. The patient herself was very positive that during the last year or two they had increased to double their former number, and her mother assured me that at birth there were none whatever. None had been noticed until the age of ten years. Most of the moles consisted of small patches of coal-black pigment, which latter, on minute inspection, might be seen to be aggregated in dots. Some of them had scarcely any appreciable thickness, but others were from one to two lines in depth. A few of them grew a crop of downy hairs, but most were smooth. They were quite different, both in colour and in thickness, from mere freckles.

Miss — was of very dark complexion and chlorotic. She has for the last year or two been much out of health, and under the treatment of Mr. F. Wood, of St. Bartholomew's Hospital, to whom I was indebted for the opportunity of seeing her. There is no history of cancer in any of her relations, nor has she herself any gland-enlargements or indications of internal organic disease. In spite, however, of her freedom for the present from any signs of cancer, I cannot help entertaining a suspicion that this multiple development of pigment accumulations is evidence of a state of constitution somewhat allied to that in which melanosis is apt to occur. I have seen cases in which the primary growth of melanosis

from which infection of the whole system ensued was certainly not larger than are some of the largest of these moles.

As regards treatment, I advised Miss —— to have the more conspicuous of the growths destroyed by escharotics; but she is not for the present inclined to submit to this. Had she been willing, I should have used the actual cautery, as the most certain and most easily limited agent for their destruction.

In juxtaposition with this case, I may record the notes of a remarkable example of multiple cancer of the skin, or rather of the subcutaneous tissues, which has recently been under my care.

IX.—*Case of Multiple Cancer of the Skin and Subcutaneous Tissues. Microscopic Examination of the Tumours. Rapid Progress of the Disease.*

Mrs. ——, a lady of 40, florid, stout, and robust-looking, was sent to me by Dr. Ramskill on December 9th, 1866. She showed me first a subcutaneous tumour on the right fore-arm. It was the size of half a walnut, lobulated and moderately firm. The skin was not discoloured, and I took it at first for a fibro-fatty growth. She told me she had many of them, and that one of them, on the left thigh, had been there for two years. All the rest she said had come within the last two months. This latter fact aroused my suspicions.

Several of the tumours adhered to the skin, and showed a bluish tint through it; but most of them were loose and beneath it. I suppose there were twenty or thirty of them placed with imperfect symmetry on the trunk and limbs. There was one on the face which adhered to the skin, and was discoloured as if it would ulcerate before long.

On December 16th I persuaded her to let me remove two of the tumours for examination. I took the one from the face and one from the chest. The characters of the two were exactly alike. They consisted of well-defined growths, which adhered closely to the adjacent structures; fat; and skin. One was as large as a filbert, the other as large as a bean. They were soft, and of a semi-transparent gelatinous appearance, especially towards the surface. In the centre each showed signs of breaking down, and the structure was yellow and more opaque (fatty): they looked like soft cancer. There were dots of extravasated blood in various stages of change. Under the microscope they showed cells

of various sizes, mostly round or oval, containing large nuclei. Some cells had two, three, or more nuclei; others only one. All were dimly granular (very delicately so). There were many free nuclei, and some caudate cells. The appearances were characteristic of medullary cancer.

There was no history of cancer in the patient's family. She had herself enjoyed excellent health up to the present time, and beyond the mental anxiety which the tumours had caused her, she had as yet not suffered much. She was not aware that she had a congenital mole on any part of her body. The little tumour which first appeared two years ago on the skin of the left thigh, grew slowly and gave her no trouble; but soon afterwards the glands in the left groin enlarged a little. Even at the present time, however, there was but little enlargement of these, and there were no indications of disease of the viscera.

A few weeks later Mr. Paget saw Mrs. — and gave the same diagnosis as I had done. The sequel of the case has fully confirmed it. In April I learnt that many of the tumours had much increased in size, and some appeared about to ulcerate. The general health had rapidly failed and the patient had become thin and very feeble.

Cases of multiple cancer of the skin or subcutaneous tissues are certainly rare, and most that I have seen were more or less definitely of the melanotic character. In this instance there was no pigment in any of the tumours, although some of them had a bluish tinge. I recollect seeing in St. Bartholomew's Hospital, many years ago, a man who presented a somewhat similar state of things, but in whom all the tumours adhered to the skin, and had a very remarkable bluish-green tinge. It was diagnosed by the name of "chloroma," and was believed to be malignant. The man died a few months later. Dr. Woodman, our late resident Medical Officer at the London Hospital, showed me in a medical ward another example of the same state in a middle-aged man. I believe Dr. Woodman excised one of the "chloroma" tumours, and found it on examination to be cancerous. This patient left the Hospital, and subsequently died.

X.—*Case of Distension of the Sebaceous Follicles of the Eyelids in patches. Remarks on the peculiarities of various disorders of the follicles of these parts.*

Amongst the drawings which I have recently added to our collection in the Museum of the Hospital for Skin Diseases

(Blackfriars), is one representing symmetrical black patches on the eyelids of an elderly and very healthy man. The interest of the case lies in its features of resemblance to, and of difference from, the disease known as "ichthyosis sebacea" and "vitiligoidea." As to the pathological anatomy of the changes in this case there can be no hesitation. On each lower eyelid below the inner canthus is a patch, the size of the end of one's thumb, and abruptly defined, which is quite black. On looking closely, it is clear that the colour is due to an aggregation of the black ends of pellets of sebaceous matter which distend the follicles. They are precisely similar to those of acne, only they occur in closely-set groups, and in an elderly man who never in his life suffered from ordinary acne. In addition to the larger patches, there are a few smaller ones on different parts of the upper and lower eyelids, and some isolated ones: all are placed symmetrically. The disease is confined to the eyelids; thus resembling what we often meet with in vitiligoidea. Had the secretion been extruded from the follicle so as to collect in a scab over the patch, then we should have the state which constitutes "ichthyosis spuria seu sebacea."

I would ask to note that the case illustrates what we often have occasion to remark, that the sebaceous follicles of the skin of the eyelids show peculiar tendencies to disease, and to peculiar conditions of disease. These are more often seen, as in this case, in old age, and are probably a species of senile degeneration; but in infancy, childhood, and early adult life, we also meet not unfrequently with curiously diseased states of the follicles of these parts, when the rest of the surface is free. Sometimes it is a distension with a small quantity of white secretion, which remains *in statu quo* for years, and never blackens (the orifice being probably covered by transparent epidermis). This in infants is sometimes called "strophulus albidus," and in young adults "miliun seu grutum." It is always symmetrical, and never causes any inconvenience. Not only are the follicles distended, but there is generally some hypertrophy of their gland-structure. In other more rare cases the follicles hypertrophy, but scarcely secrete at all, and we have little firm swellings, which widen out into small papules or flat-topped tubercles, which never inflame, and which may last for years. Sometimes these coalesce into groups, and becoming then very conspicuous, earn for themselves in this exaggerated condition the high-sounding name of "vitiligo," or from other authorities, of "vitiligoidea."

These various conditions of chronic disease have, in addition to the fact that they affect the same locality, certain other features in common. They are all persistent, all symmetrical,

and none of them associated with any appreciable disorder of the general health. The only motive for treatment is the disfigurement which they produce; and this in elderly patients is usually disregarded. The old man whose case has suggested these remarks, is a sailor aged 60, in robust health, and quite free from other skin disease. The patches have been gradually forming for thirteen years.

I ought to add that the skin tissue immediately surrounding the enlarged and distended follicles is thickened by a pale fibroid deposit. This latter, however, is nowhere in large quantity, and nowhere is it yellow, like the true vitiligoidea.

XI.—*On the Relative Frequency of Tinea tonsurans amongst the Rich and the Poor. Hair-brush Contagion.*

The fact that common boarding-school ringworm (*Tinea tonsurans*) is a rare disease amongst the poorer classes, seems to me very definite and well worthy of note. To avoid fallacy in our estimates of the relative frequency of different diseases in different sections of society, we must of course keep in mind the immense numerical superiority of the poor over the rich. If any disease were equally common in both, we ought probably to see it at least five times in hospital practice for once in our consulting-rooms. Now my own experience as regards ringworm has been almost the reverse of this. I see the disease frequently in private, and but rarely at hospitals. Further, I have often remarked that the cases which I do see at hospitals are usually not in the children of the poorest but in those of well-to-do parents.

During a ten years' surgery to the Metropolitan Free Hospital,—with its immense number of out-patients, all admitted without letters of recommendation,—I had excellent opportunities for estimating the frequency of different forms of skin disease amongst the poor. Our patients were most of them of the poorest and the dirtiest that London could furnish. Common contagious porrigo was exceedingly common, molluscum contagiosum was not unfrequent, scabies abounded, and a case of favus would occur every now and then. Ringworm was almost as rare as favus. Now in private practice I have seen very numerous groups of cases of ringworm, whilst in the whole of my life I have seen but one example of favus, and this latter was in the wife of a small farmer, and the daughter, I believe, of a day-labourer.

This frequency amongst the rich, and rarity amongst the poor, seems to me to support the belief that the disease has

nothing to do with neglect of cleanliness or of hygienic precautions ; and to support the opinion that it is due to some accidental contagion to which the richer classes are more exposed. The only hypothesis that I can suggest is that the disease chiefly spreads through contagion by hair-brushes. The children of the poor use brushes far less frequently than those of the rich, and probably but rarely use any brush out of their own homes. The children of the richer classes, however, visit much amongst each other, and are probably far from particular as to always taking their own brushes and always avoiding the use of those of others.

That ringworm has any special connection with the health of the child I disbelieve *in toto*. I have seen it many times in children who ailed nothing whatever. That it prefers a delicate epidermis and fine soft hair is, I think, highly probable, as also that a damp, warm atmosphere favours its development. I learnt, during a visit to Jersey, that it is very common there ; and I have seen a group of unusually severe cases from Cornwall.

Facts have come to my knowledge repeatedly in which it spread (or appeared to spread) amongst the younger members of several families who were on visiting terms but not related, and whose children were in very various conditions of health, but most of them to all appearance perfectly well.

A NEW FUNGUS. By TILBURY FOX, M.D., M.R.C.P.,
Physician to St. John's Hospital for Diseases of the Skin.

IN the last number of the *Journal* I made some general remarks relative to the subject of parasitic disease, and incidentally touched upon the question of the identity of the fungi found in connection with diseased conditions on the exterior and in the interior of man. Since the date at which I wrote, a new form of vegetable growth has been discovered on certain varieties of false hair, and the facts observed in connection with its development seem to me to afford very remarkable proof of the truth of the statements I have from time to time put forth relative to the nature of parasitic fungi.

The discovery of the new species is claimed by Dr. Beigel, but it is only due to myself to say that we appear to have stumbled across the same thing at a precisely similar time, though I have no wish to deprive Dr. Beigel of the full credit of his original observation. Dr. Beigel submitted the "growth"

to the inspection of some of the German algologists, and as he stated when exhibiting the specimen before the Pathological Society, it was pronounced to be a species of *Pleurococcus*, and designated after the name of Dr. Beigel; and in this view of its algal nature Dr. Beigel agrees. I stated at the meeting in question that I was conversant with the appearance presented by the vegetation, and believed it to be identical with the "gregarinæ" about which so much stir had been made. I moreover thought it might be related to the fungus described as the *Zooglæa capillorum* by Martin.

In the *Lancet* of January, 1866, Dr. Cobbold, in commenting upon the spurious entozoa found in cattle plague, referred to the fact that Lindemann had discovered psorospermial sacs on the hair of a chlorotic patient at Nischney Novgorod; and it seems to me that these are the bodies which Dr. Beigel and I have found in German hair imported into England.

As my opinion had been repeatedly asked on the point, I took the opportunity to give a general account, illustrated by woodcuts, in the May number of *Hardwicke's Science Gossip*, and some of the figures I reproduce here.

I do not touch the popular and sensation aspect of the matter, but only the scientific points involved in it, and these are by no means of insignificant import. It may be well to observe that the term "gregarina" has been used in a very different sense by observers; and apparently both animal and vegetable organisms have been included under that designation. I cannot but think that the gregarinæ of Lindemann are vegetable growths of an algal character. Their description answers, as regards seat, naked-eye appearance, and microscopic features, to that of the growth now under notice. The true gregarina is an animal. When I observed at the Pathological Society that the growths exhibited by Dr. Beigel were "gregarinæ," I referred of course to the bodies described by Lindemann.

But now to the description. If we take a hair on which these parasitic fungi are found, we notice little dark knots the size of pin-points, surrounding the shaft, especially towards the point: they are difficult to detach, and surround the hair equally in all directions. They may be scraped off with a little trouble. If a hair be placed under the microscope, with a quarter-inch objective, an appearance like that presented in fig. 1 will be seen.

There will be observed fungus—for it is evidently a fungus—made up of two forms; one in the centre composed of cells undergoing a transformation to the changed or *mycelial* condition, and a second consisting of large round and oval spores

—the *sporular* phase. Figure 2 shows a little of the outer portion of fig. 1, magnified somewhat more highly. The spores are very large, as large as the finest of the achorion: they have distinct nuclei. On adding water to the fungus, little granules are detached, and float away in active motion from the mass. These granules are clearly an early stage of the more developed condition, and constitute a fruitful source of propagation. Many of the larger cells resemble torula very closely; indeed, they could not be distinguished. The whole of the mass is outside the hair, the structure of which is healthy; its cuticle, however, is intimately connected with the cellular aggregation, its scales intermingling with the granules, and it is detached when the mass is roughly handled, and torn away from the fibrous structure of the hair, leaving the shaft somewhat roughened.



Fig. 1.



Fig. 2.

Now I have found these masses in an early stage taking origin within the empty envelopes of the ova of the pediculi. The remnants of the envelopes are often to be found intermingled with the parasitic masses; and as the latter grow larger, the traces of the former grow less and less, and finally disappear. This observation would lead me to think that the germs of the fungus find the glutinous material, that causes the adherence of the ova of the pediculus to the hair-shaft, and the envelope itself, a favourable nidus for their development; and this is the more evident from the fact that the hair itself is uninvaded and healthy, and the parasitic vegetation is found on hair which has grown on the head of subjects of vigorous health,—subjects therefore not liable to parasitic disease, or to offer an inducement to the lodgement and development of fungi or algæ. The original source of the germs of the fungus in question is uncertain; it may be the water used for washing, or the rectum of the louse, as suggested: that is a point demanding further inquiry. That the ova remains

furnish a fitting nidus, under the influence of heat and moisture, I have little doubt.

These cell-structures found on the hair can be made to develop, for they seem to be in that very condition which is most favourable for rapid and free growth, and it is possible that, under varied influences, many different appearances may be produced. The aspect of the growth on the hair is wholly that of a fungus. Placed in water, the cells enlarge and subdivide, get filled with granules that move around within the cell-wall, and assume a greenish tint; in fact, take on the appearance of an alga. My friend Mr. Ray Lankester has grown them in soup, and I have watched them germinating in water, liquor potassæ, and sugar-and-water.

The general results are as follows:—The cells or outer portion of the mass seen on the hair undergo continuous subdivisions, so that we have double, triple, quaternate cells, and oftentimes a mass not unlike sarcina; in fact, certain conditions that give countenance to the view I have elsewhere



Fig. 3.

enunciated, that sarcina is a form of penicillium. Fig. 3 represents one of the large cells (spores) in the act of subdivision. The subdivisions are from 1-4000th to 1-3000th of an inch in size. They become filled with granules that enlarge into cells, and we have as a result large free cells filled with young ones. These brood-cells become

covered over with processes resembling cilia, move about, and subsequently discharge their contents, which in turn give



Fig. 4.

origin to the early condition of the fungus. In some of the large cells, processes like pseudopodia are put forth. These occurrences have been portrayed in *Science Gossip*. The mycelial or central portion of the mass on the hair steadily develops, until it produces a vigorous crop of chained cells, seen in fig. 4, the terminal filaments of which exhibit appearances identical with the fructification of oidium, seen in fig. 5.



Fig. 5.

I have thought this brief history of the "new fungus" would be interesting to the readers of the *Cutaneous Journal*. The power to produce disease depends upon the implantation of the early phase of the fungus upon the scalp or surface of an ill-nourished person of early age. I have no hesitation in saying, under these circumstances, a parasitic pityriasis or a severe form of tinea would result. Of the nature of the parasite I entertain not the least doubt, and whatever may be said to the contrary, the figures I have given attest the fact that it belongs to the same class as the achorion and the oidium. The most interesting feature is the cycle of changes through which it runs. We have in one direction an assumption of an algal form; then amœbiform changes, a nursing or brood condition, as it were, which gives origin to the early granular or stromal form of fungus.

The history of the fungus is a very instructing one, and teaches us how very cautious we should be in the assertion of the discovery of new species.

ON SOME OF THE RARER FORMS OF SKIN DISEASE. By DR. M'CALL ANDERSON, Lecturer on Practice of Medicine in Anderson's University; Physician to the Dispensary for Skin Diseases, &c., Glasgow.

I.—*Case of Elephantiasis Arabum, treated by means of Ligature of the External Iliac Artery.*

Jane O., æt. 17, was admitted at the Dispensary for Skin Diseases, Glasgow, on June 22nd, 1866. She exhibited an elephantine condition of the left leg, while the right was the seat of the same morbid condition in the earliest stage of its development.

The disease commenced in the left limb about five years previous to admission, with an attack of inflammation of the skin, apparently of an erysipelatous character.

Up to the present date she seems to have had about a dozen of these attacks of inflammation, each being succeeded by an increase in the size of the leg. The patient was seen during one of these attacks by my late clinical assistant, Dr. Alexander Forsyth, who reported that it was ushered in by sickness and vomiting, followed by febrile symptoms; the skin of the left leg becoming red, swelled, tense, and so painful as to prevent movement. The redness extended up to the middle of the calf, but there was no tendency to the formation of bullæ. In a few days, as the inflammation subsided, the parts became softer, pitted slightly on pressure, and presented a shrivelled appearance. Finally, desquamation set in, the scales being about a quarter of an inch in diameter. Most of the other attacks of inflammation were much more severe, and some of them implicated the thigh as well as the leg.

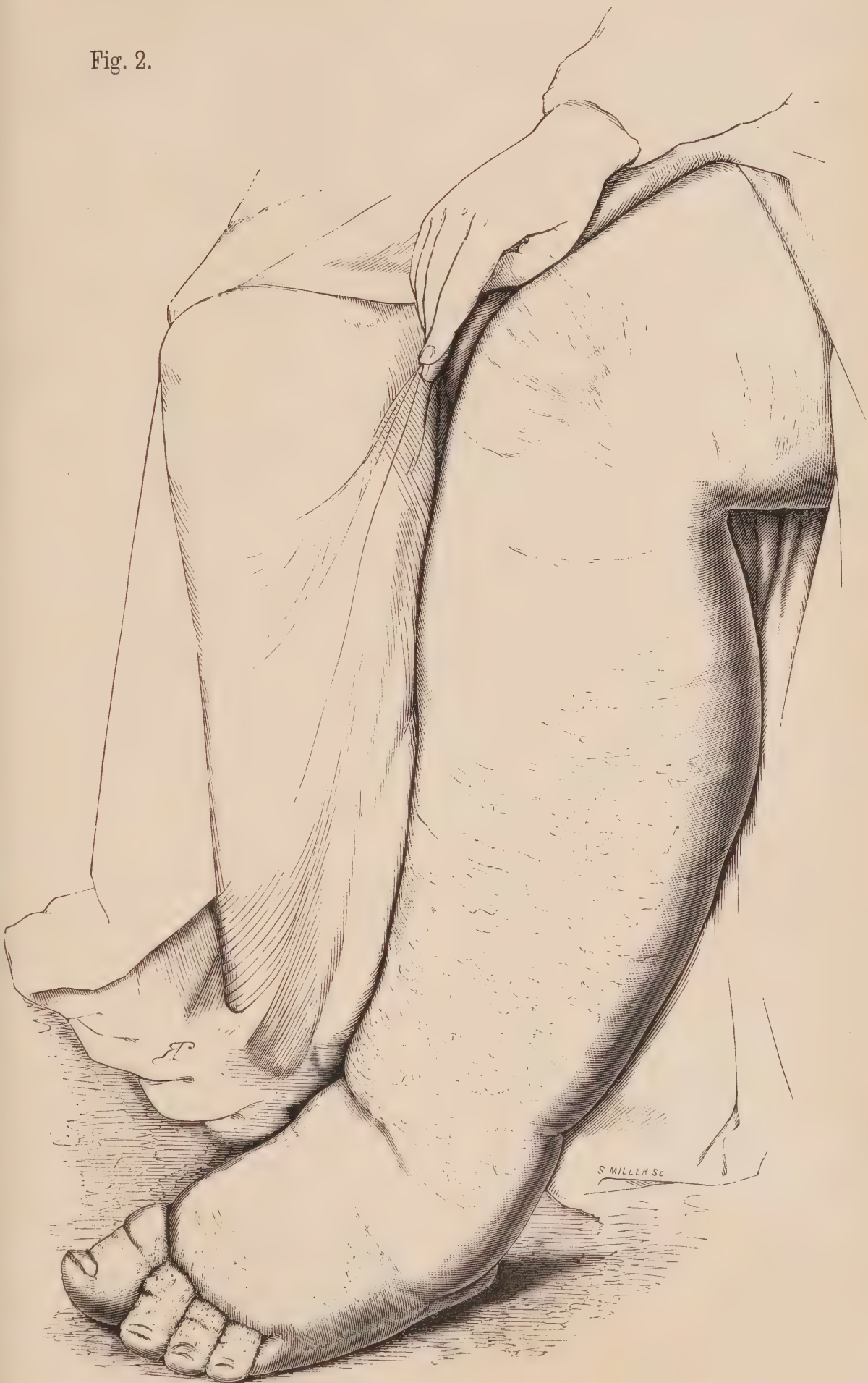
On admission, the limb presented the appearance delineated in fig. 1. It will be observed that the parts are not only enormously enlarged, but also extremely misshapen. Deep sulci are seen on the flexor surfaces of the joints, especially at the ankle-joint, where the sulcus was two inches in depth. On the front of the knee, along the edges of the sole, and most markedly of all, upon the dorsal surfaces of the toes, the skin bore a close resemblance to that of a patient labouring under ichthyosis,—an appearance which at an earlier period of the disease was more extensively diffused on the leg. The rest of the skin had a very coarse appearance, the natural markings of the surface being greatly exaggerated.

Fig. 1.



Dr. McCall Anderson's Case of Elephantiasis Arabum.

Fig. 2.



Dr. McCall Anderson's Case of Elephantiasis Arabum.

Fig. 3.



Dr. McCall Anderson's Case of Elephantiasis Arabum.

To such an extent was the skin hypertrophied, that at no part could it be pinched up between the finger and thumb, and no bone could be felt, except at the bottom of the sulcus at the ankle-joint, the skin lining which was smooth and not much thickened. The limb measured—round the ankle, $21\frac{1}{8}$ in.; calf, $26\frac{7}{8}$ in.; and thigh, 23 in.

As may be inferred from the above, the hypertrophy of the thigh was not carried to nearly the same extent as that of the leg; and, indeed, the skin on the internal and posterior aspect of the former was nearly normal.

The appearance of the right leg, which is delineated in fig. 3, is of great interest, as showing the appearance of the disease in its early stage. It had only been once attacked by inflammation, which did not extend above the knee. It measured round the ankle, 13 in.; calf, $16\frac{1}{8}$ in.; thigh, $19\frac{1}{2}$ in.

With the exception of the disease of the lower extremities, the patient seemed to be in perfect health in every respect, and neither she nor her parents had ever resided in foreign parts.

In the year 1863 she was under the care of Dr. Lyon, in the Glasgow Royal Infirmary, and at that time, under the influence of rest and careful bandaging, the progress of the disease appears to have been temporarily arrested.

When she came under my care she seemed to improve considerably under the use of small doses of Fowler's solution, combined with rest and the use of a flannel bandage; for the patient thought that the affected parts were considerably softer, and on the 10th September, 1866, the limb measured—round the ankle, $17\frac{3}{8}$ in.; calf, 26 in.; and thigh, 23 in.

From this time no improvement took place in the size or appearance of the affected parts, so that I was induced to recommend her to the care of my friend Dr. George Buchanan, at the Glasgow Royal Infirmary, with the view of having a ligature placed round the external iliac artery.

She was admitted into the Infirmary on the 2nd of November, 1866.

On December 21st, the patient having been put fully under the influence of chloroform, the operation was performed by Dr. Buchanan.

It is not my intention to enter into any surgical details, either of the operation or the after-treatment, but it may be stated that on the 22nd, the day following the operation, the parts were flabbier than before, and on the 25th they were so soft that the upper part of the tibia could be felt for the first time. The measurement of the limb on this day gave the following result:—Round the ankle, $16\frac{1}{2}$ in.; calf, $21\frac{1}{2}$ in.; thigh, $22\frac{1}{2}$ in.

On the 3rd of January, 1867, thirteen days after the operation, the ligatures came away while the dressings were being removed; after which the discharge diminished, granulations sprang up, and the wound had completely healed three months after the operation was performed.

She was dismissed on April 30th, 1867.

On the 17th of May, 1867, she visited the Dispensary, when I had an opportunity of examining the limb. It was very greatly reduced in size, though it still retained, to a considerable extent, its distorted shape, as may be seen from the accompanying woodcut (see fig. 2). The most remarkable improvement, however, consisted in the fact that the abnormal firmness and inelastic character of the skin had given place to a softness and elasticity which was all but normal, and the patient said that the leg was very much lighter than before, and that she could walk with greater ease. The measurements on this day gave the following result:—Round the ankle, 15 in.; calf, 17 in.; and thigh, 21 in.

The results of the treatment which was adopted in this case can be seen at a glance by placing together all the measurements, as follows:—

	Round the ankle.	Round the calf.	Round the thigh.
<i>June</i> 22, 1866.—On admission at the Dispensary for Skin Diseases, Glasgow	in. 21 $\frac{1}{8}$	in. 26 $\frac{7}{8}$	in. 23
<i>Sept.</i> 10, 1866.—After a course of arseni- cal treatment, bandaging, and comparative rest	17 $\frac{3}{8}$	26	23
<i>Dec.</i> 25, 1866.—Four days after ligature of the external iliac artery . . .	15 $\frac{1}{2}$	21 $\frac{1}{2}$	22 $\frac{1}{2}$
<i>May</i> 17, 1867.—After her dismissal from the Glasgow Royal Infir- mary	15	17	21

In the forty-ninth volume of the “Medico-Chirurgical Transactions” (for 1866, p. 175), a case very similar to the above, and which was likewise treated successfully by means of ligature of the external iliac artery, is narrated by Mr. Bryant. In this case, as in mine, neither the patient (who was 25 years of age) nor her parents had ever resided abroad; and, with the exception of the elephantiasis, she had always

enjoyed good health. In her case, however, the disease was entirely confined to the left limb, and was unattended by inflammation : in mine it implicated both limbs ; the right exhibiting the earliest, the left the most advanced stage of the complaint. As may be seen from the accompanying woodcut, the leg, in the early stage, has the appearance of being œdematous, but there was not a vestige of pitting upon pressure. The progressive hypertrophy of the parts was evidently induced, too, by well-defined attacks of inflammation of the skin, the right leg having only once been the seat of inflammation, the left about a dozen times.

In Mr. Bryant's case the left leg measured round the calf $22\frac{1}{2}$ in. before the operation, and $5\frac{1}{2}$ months after it, $15\frac{1}{2}$ in. ; there being a diminution of 7 in. in the circumference of the calf as the result of the operation.

In my case the left leg measured round the calf 26 in. before the operation, and rather more than $5\frac{1}{2}$ months after it, 17 in. ; there being a diminution of 9 in. in the circumference of the calf as the result of the operation.

For further particulars as to Mr. Bryant's case, and for an abstract of cases published by Dr. Carnochan, of New York, and others, the reader is referred to the article in the " *Medico-Chirurgical Transactions*."

This disease has received a variety of names ; as for example, *Elephantiasis Arabum*, *Bucnemia tropica*, and *Barbadoes Leg* ; while Mr. Erasmus Wilson proposes that it should be named *Spargosis*, a term handed down to us from Hippocrates. I prefer retaining the name *Elephantiasis Arabum*, although it is apt to lead to the erroneous belief that there is some connection between this disease and *Elephantiasis Græcorum*, as being the one which is at present most generally in use. It seems to have more of a local than of a constitutional origin, and to be due to excessive nutrition of the affected parts, which produces hypertrophy of the skin and of the subcutaneous cellular tissue ; and that this is its true pathology is corroborated by the wonderful results which follow upon a diminution of the supply of blood to the part, by means of ligature of the main artery of the limb.

ON SPARGOSIS FIBRO-AREOLARIS OR ELEPHANTIASIS ARABUM; Its Pathology and Treatment. By ERASMUS WILSON, F.R.S.

ELEPHANTIASIS ARABUM is an hypertrophy of the integument and subcutaneous areolo-fibrous tissue; the part of the structure especially involved being the white fibrous tissue both of the corium and of the connective web (*fibroma*, Virchow). The fasciculi of white fibrous substance, entering into the composition of the corium, are thick and coarse, and the areolæ large, and distended with a crude and embryonic cell-tissue, together with a quantity of serous fluid. Hypertrophy of the fibrous structure of the integument most frequently occurs in the lower limb (*spargosis cruralis*), generally in one only, but sometimes in both, and its effect is to enlarge the limb to a prodigious size; wherein has originated a very appropriate name for the affection, namely, *boucnesia*, or *huge leg*. Boucnesia is most commonly met with in tropical countries (*spargosis cruralis tropica*), as in the East and West Indies, in China and Arabia; hence its specific designation, *boucnesia tropica*; and its popular synonyms, *Barbadoes leg* and *Cochin leg*. The earliest accounts of the disease which we possess come from the Arabian physicians, by whom it was called *dal fil*, or elephant leg; and the *dal fil* of the Arabians became, in the language of our Greek fathers, *elephas*, *elephanta*, and *elephantiasis*; but as the Greeks had already an elephantiasis of their own, it has become necessary in modern times to distinguish between the elephantiasis Arabum and the elephantiasis Græcorum.

If the elephantine disease (*elephas pachydermia*) were limited to the leg, the most correct and best expression for it would undoubtedly be, *boucnesia*; but as it is often met with in other parts of the body, and especially in the scrotum (*spargosis scrotalis*), the term boucnesia would be inapplicable to the latter region; and therefore a reason exists for retaining the word elephantiasis with the affix Arabum; which in other respects is an objectionable term, as being applied to a disease of a totally different nature, namely the elephantiasis Græcorum, or leprosy; or of adopting the more convenient and classical term, *spargosis*.

It is interesting to note that in the northern islands of the West Indies, for example, in Bermuda, this disease has a trivial character, and is termed the "rose;" and it is only in the

South that it acquires the larger proportions of the "Barbadoes leg." The "rose" is a mild form of cellulitis attended with erythema, and sometimes approaching to a slight erysipelas; it is painless and slow in its progress; remaining stationary for a while; and every now and then awakening to fresh activity and assuming a periodic character. These periodic paroxysms are accompanied with some febrile action, and have given rise to a popular belief in the association of the disease with intermittent fever. It is most frequently seen in middle-aged females of sedentary habits, and especially in such as are the subjects of dyspepsia and gastric derangement.

The boucnemia is an aggravated form of the "rose," and its frequent association with febrile symptoms of moderate severity, together with its paroxysmal character, have caused its popular denomination of "fever and ague." In general the disease is insidious in its origin, and being unattended with pain, has made some progress before it is observed, the first sign of its presence being a feeling of tightness and weight with an appearance of swelling; while at other times it makes its beginning like a simple erysipelas, accompanied and succeeded by œdema from serous infiltration into the tegumentary tissues. Excepting during the moments of its febrile exacerbations, boucnemia is unaccompanied with symptoms of constitutional disturbance and is consistent with a state of good general health.

We have ourselves placed on record the characters of an erythematous cellulitis, very closely resembling, and possibly identical with the mode of invasion of the rose and boucnemia. Our patient was a lady thirty years of age, who after some præcordial suffering, consisting principally in a sense of weight and nausea, was attacked with slight erythema of the face, neck, and shoulders. The redness was inconsiderable and but slightly pruritic, but there existed besides an uncomfortable feeling of weight or pressure and stiffness, accompanied with a little swelling and a sense of rigidity, which interfered with the motion of her jaws and neck. We first saw her a few weeks after the commencement of the attack, when the erythema had subsided without desquamation, and when the more striking symptoms of the affection were paleness and a yellow tinge of the skin, with a sensation to the touch of thickening, solidity, and hardness of the skin, and subcutaneous cellular and adipose tissue. It was clearly evident that the density of the integument was not due to simple œdema, and although there was some degree of pitting on pressure, it was the kind of pitting that would be produced by pressure on a skin of lard rather than upon a portion of skin merely in-

filtrated with serous fluid. When the hand was laid heavily upon the skin, it left a pale impression, which very slowly recovered its normal colour. The lower border of this altered skin could be distinctly traced with the finger, and gradually merged into the healthy integument. In seeking to distinguish this affection, we have termed it *skleriasis telæ cellularis et adiposæ*; but it might very reasonably be brought into the group of which spargosis stands at the head.

According to this view of the pathology of the disease, elephantiasis Arabum is an inflammation of the fibrous tissues of the integument and areolar tissue of the part, accompanied with the accumulation of formative and reproductive cells and tissue and albuminous fluid in the areolar spaces. It is to such accumulation that is due the swelling or hypertrophy of the diseased structures, together with the hardness, the density, and the semi-transparency or brawn-like appearance of the integument. It is also to be noted that some differences may occur in the relative proportion of the solid and the fluid material, in the one case giving rise to a harder and more resistant mass; in the other to one more decidedly oedematous. In the case of a gentleman, who had suffered from elephantiasis Arabum of one leg for eighteen years, the enlargement extending as high as the knee, the disease was very much relieved by an ulcer which formed in the calf, and gave exit to a considerable quantity of serous fluid; whereas in a more solid form of spargosis such a means of relief would be unlikely to occur.

In countries where the disease is endemic, its origin must be referred to hygienic causes, similar probably to those which engender the affection with which it is popularly associated, namely intermittent fever, or "fever and ague." And it is not unlikely that similar causes may occasionally be present in our own country; in what other way can we explain the case of chronic cellulitis with condensation of the integument of the shoulders and neck above narrated? And to the same causes must be referred a case of elephantiasis Arabum of the scrotum occurring in the instance of an English country gentleman, which lately came under our notice.

On the other hand, in countries where the disease is non-endemical, a variety of local lesions determining a morbid function of the vasculo-motor nerves of the part, may be the predisposing cause of the affection. In a case which occurred to Mr. Bryant, the predisposing cause would seem to have been scarlatina; the swelling began in the calf of the leg during convalescence from scarlet fever; another case was traceable to intermittent fever; a third followed phlegmasia

dolens ; a fourth was attributable to a sprain, the patient residing in a country where the disease was endemic ; while a fifth case took its origin in common œdema of gravitation.

The nature of the cause of the disease must necessarily influence our opinion very considerably, with regard to the probable success of operative procedure, and an operation which may be perfectly successful in this country, where a local cause only is to be subdued, might not be so successful in another country, where endemical causes prevail. This may in some degree explain the failure of Dr. Fahrér's operation ; but there is another cause, which would render an operation less satisfactory in countries where the disease is endemical than in our own ; namely, the probability of extension of disease from the vessels of the fibrous and cellular structures of the integument to those of the rest of the limb. That this is apt to occur is shown by the observations of Dr. Wilks on the morbid anatomy of the cases which have been brought under his notice for examination ; and the opinions expressed by those who have observed the disease in the West Indies, and have come to the conclusion that it depended on disease of the veins and of the lymphatic system.

In the second volume of the "Medico-Chirurgical Transactions" there occurs the "History of an extraordinary enlargement of the right lower extremity ; with a description of some morbid changes in the papillæ of the cutis," read before the society in June, 1810, by Thomas Chevalier, surgeon-extraordinary to the Prince Regent and surgeon to the Westminster General Dispensary. He describes two cases which had fallen under his own notice, both occurring in women ; and refers to a similar case in the upper extremity, mentioned by Haller in the fifth volume of his "*Disputationes Chirurgicæ.*"

Sarah Rogers, aged 46, one of the cases in question, had suffered from the disease for nine years before the limb had become so unwieldy as to prevent her going about ; she then took to her bed, and was bedridden for five years before she died, her death being consequent on sphacelus of the skin of the extremity of the foot. The origin of the affection was œdema puerperarum or phlegmasia dolens, and, in bulk, the limb measured around the middle of the thigh 3 ft. 6 in., and around the calf of the leg 2 ft. ; the greatest relative enlargement occupying the dorsum of the foot, where the integument was so "immensely expanded as to project several inches beyond the toes." The bulk arose entirely from thickening of the integument and subcutaneous cellular tissue, which measured in front of the tibia a full inch and a half in depth, while the

derma in some parts measured a quarter of an inch, and was composed of an interlacement of coarse white fibres resembling the hide of the larger quadrupeds. The other tissues of the limb were sound; but one of the most remarkable features of this case was a state of hypertrophy of the dermal papillæ of the foot and toes, which were as large as small warts.

The other case was that of a woman whose legs began to swell at the cessation of menstruation, and who died at the age of 67. For the last two years of her life, she had been confined to her chair, and had been unable to lie down in bed; and her death resulted from mortification. In this case, as in the former, there existed hypertrophy of the papillæ cutis; "each of which appeared elongated and enlarged into a roundish tubercle, over the surface of which a thick and almost horny cuticle grew, giving the surface its dark colour and rough appearance."

Mr. Bryant, of Guy's Hospital, in the forty-ninth volume of the "*Medico-Chirurgical Transactions*," in a paper read before the society in June, 1866, "On a case of elephantiasis Arabum or elephas successfully treated by the application of a ligature to the main artery of the limb," informs us that the idea of tying the artery of the limb for this disease originated with Dr. Carnochan, of New York. The patient was a man 27 years of age, the disease occupied the right leg, which measured $19\frac{1}{2}$ in. around the calf, and first made its appearance after an attack of intermittent fever. On the 22nd of March, 1851, the femoral artery was tied; the vessel was large and diseased, and secondary hæmorrhage occurred on the eleventh day, when the ligature came away. The external iliac was then secured by Dr. Hosack, but was of small size, and produced no material influence on the hæmorrhage, which was only arrested by pressure on the distal end of the bleeding vessel. Three months after the operation this patient left the hospital cured.

Dr. Carnochan's second case was also a man, aged 39. The disease occupied the left leg, had been in existence six years, and was accompanied with extensive ulceration of the integument. The femoral artery was tied on the 23rd of May, 1857, and three months after the operation the leg was restored to its natural size, and the ulcers were healed. In November, 1857, he tied the femoral artery in the case of a young woman, aged 25, who had suffered from the disease for one year, its occurrence having been preceded by pain for four years. She was enabled to walk at the end of two months; but exercise brought back some œdema, and she was kept on the couch

until she was finally cured. In a fourth case, also that of a woman, aged 26, both legs were affected, and in succession both femoral arteries were tied. The disease had existed for three years, and was preceded by pain in the part.

These operations by Carnochan were followed by others at the hands of British surgeons; by Statham in London; Butcher in Dublin; Fahrer in Calcutta; Alcock in Staffordshire; Bryant in Guy's Hospital; and more recently by Buchanan in Glasgow. Statham, in 1858, tied the anterior tibial artery for "solid œdema" of the foot, in a man of middle age. Butcher, in 1861, tied the femoral artery in a woman 44 years of age, for boucnemia of the right limb of eighteen years' growth, attended with severe pain. Dr. J. Fahrer tied the femoral artery in the case of a Bengalee, aged 30, who had suffered from the disease in the right leg for seven years, the progress of the affection being accompanied with periodical attacks of fever; and Mr. Alcock, in 1866, also tied the femoral artery; the operation being attended with success in every case but that of the Bengalee, who died of pyæmia. It may be noted also that the latter case illustrates the endemic origin of the disease, and its probable more extensive pervasion of the tissues.

We now come to one of the most recent of the cases which have been operated on, and as the ligature of the main artery of the limb must for the future be regarded as the standard and radical, and at the same time a successful, treatment of elephantiasis Arabum, we will follow the details of Mr. Bryant's case a little more closely. The patient was a young Welsh woman, aged 25; she had suffered an attack of scarlatina ten years previously, and while recovering from this disease, she first experienced some swelling in the calf of the left leg. The swelling was unattended with pain, and gradually spread upwards to the knee. After sleeping in a damp bed, two years later, the swelling increased more rapidly, and involved the thigh; and from that time to the present has continued to enlarge. In other respects she enjoyed good health; but the treatment which she has undergone from time to time, namely, pressure, position, hot baths, and the local application of cold, have been unattended with any satisfactory results.

On admission into hospital, the limb presented three massive bulges below the knee, and one occupying the outer and posterior aspect of the thigh, immediately above the knee; the foot being wholly unaffected. The two lower bulges formed annuli around the leg; that of the calf was most prominent posteriorly and externally, and in the deep groove

between the two upper bulges were the marks of cicatrices of ulcers, which had formed during the last three years, and which on two occasions had given exit to a copious discharge of sanguinolent serum and blood. The skin was hard and brawny from infiltration, and measured around the thickest part of the calf 24 in., the calf of the sound leg measuring $15\frac{1}{2}$ in.; and around the thigh 28 in., the sound limb measuring only 21 in.

On placing the patient in a recumbent position, and the limb on an inclined plane, the size was reduced one inch in two days; and at the end of five days another half-inch was gained; but here the improvement ceased, and on the 31st of October, 1865, when a ligature was placed around the external iliac artery, the gross measurements were $22\frac{1}{2}$ in. for the calf, and 27 in. for the thigh. On the eighth day following the operation, the swelling was softer to the touch, and the bulk $19\frac{1}{2}$ in. and 24 in.; at the end of two weeks the measurements were $18\frac{3}{4}$ in. and 23 in.; at the expiration of a month the calf measured 17 in.; at six weeks there was little difference to the touch between the two limbs, and the calf of the affected leg was only one inch greater in diameter than that of the sound side. About this time the patient was allowed to get up to participate in the festivities of Christmas, and in consequence of walking too much, the limb became œdematous, and the calf measured $18\frac{1}{2}$ inches. She was again sent to bed, and the improvement in the limb became progressive and permanent, so that by the middle of March there was no difference of bulk between the two limbs; and a month later she was pronounced cured; the total period occupied in the cure being fourteen weeks.

Dr. George Buchanan's patient in the Glasgow Royal Infirmary, a woman, was operated on in December, 1866, by ligature of the external iliac artery; the ligature came away on the thirteenth day, and the operation was followed by the usual success. In May she had some return of œdema, in consequence of over-walking, but has since been going on satisfactorily.

The treatment heretofore practised for boucnemia has been position, pressure by bandage, the hot bath, the local vapour-bath, and iodine applications, with the administration internally of the iodide of potassium. But it must be admitted that the results were in general very unsatisfactory, and we were made to feel that our power of combating the disease was not at all commensurate with our expectations. Then as a final effort, we were constrained to have recourse to the knife, and it is not unlikely that even at present the knife

may in some instances be our only remedy ; for example, in elephantiasis or spargosis scrotalis. We still bear in vivid remembrance the enormous scrotum removed by Liston, and preserved in the museum of University College ; and the tremendous operation of Key, in Guy's Hospital ; also Dr. Titley's case, published in the sixth volume of the "*Medico-Chirurgical Transactions*" for 1815, and the first case operated on successfully ; the tumour descending nearly to the ground, and weighing seventy pounds.

In cases such as these, ligature of the artery would seem impracticable ; and no alternative remains but ablation of the mass. But in true boucnemia, after the results of the operations recorded above, we cannot but feel that a new, and most important and most valuable remedy has been placed within our reach ; and we are bound to congratulate those gentlemen who have taken an active part in introducing and testing that remedy so successfully.

In conclusion, we must remark that this paper was written for our first number, before we were aware of Dr. McCall Anderson's intention of writing on the subject, and deferred for want of space. We have doubtless omitted many illustrations of the disease that would have contributed to the value of the article ; and we have no other excuse for our neglect but that of excessive occupation. Dr. John Ogle has enriched the subject by his reports to the Pathological Society, on the structure of the morbid tissues ; and Mr. Martin Coates has contributed to the same society a case of spargosis brachialis, which occupied the entire arm from the insertion of the deltoid to the fingers. The arm was amputated, and weighed after removal twenty-nine pounds ; it had been growing in size for nearly fourteen years, and the patient was a woman of delicate constitution, a seven-months child, aged thirty-three years. A section of the limb displayed to the eye a state of universally hypertrophied skin, fibrous tissue infiltrated with serum, and scattered masses of hypertrophied adipose tissue.* There was some suspicion attached to this case, that it was induced by artificial means, by a ligature tied tightly around the limb. We know an instance in which a young religious lady simulated disease of the arm by a similar contrivance.

* *Pathological Transactions*, vol. xv., Session 1863-64, p. 237.

REVIEWS.

On Addison's Disease : Clinical Lectures on Addison's Disease, and a Report on Diseases of the supra-renal Capsules.
By EDWARD HEADLAM GREENHOW, M.D. 1866.

ADDISON'S disease is suggestive of an especial interest to the Dermatologist, on account of the melanopathia with which it is accompanied ; and we accept, with pleasure, the opportunity of discussing the question which Dr. Greenhow affords us, by the publication of his able researches and laborious analysis of the numerous cases of this affection recorded up to the present time. Addison's disease presents to our inquiry three kinds of symptoms ; namely, constitutional, cutaneous, and organic. The *constitutional* symptoms are, progressive and intense asthenia, as shown by extreme prostration of strength, feeble action of the heart, and tendency to vertigo and fainting ; and irritability of stomach, manifested by loss of appetite, nausea, and vomiting. The *cutaneous* symptom is a condition of melasma of the skin, to a greater or less degree and extent, with partial melasma of the lips and mucous membrane of the mouth. And the *organic* symptom is a state of disease and degeneration of the supra-renal capsules, allied to, if not identical with tuberculosis.

The constitutional symptoms are so remarkable that, in the absence of any obvious cause for their production, a haphazard diagnosis of Addison's disease would probably turn out to be correct, even without the cutaneous symptom of melanopathia being present. Addison described the disease as a peculiar form of anæmia, an idiopathic anæmia, and calls especial attention to the pearly whiteness of the conjunctiva, which contrasts so remarkably with the swarthiness of the skin. Greenhow also notes the pearly whiteness of the conjunctiva, but leads us to believe that the anæmic condition of that membrane is due, not to deficiency of red blood, but to failure of power in the heart to push the blood onwards to the surface. The surface of the body is pallid, but there is little loss of flesh, and, " notwithstanding the extreme

debility, breathlessness on exertion, feeble pulse, and general exhaustion, neither emaciation nor anæmia, properly speaking, exists in simple cases of Addison's disease. The blood, in all the *post-mortem* examinations I have witnessed, was dark-coloured and rather thick, and the muscles generally firm, well nourished, and of a deep red colour."

The melasma which accompanies Addison's disease is a swarthy yellow-brown, sometimes an olive or greenish-brown; in the latter instance suggesting the term bronze-colour. It is manifested most strikingly on the parts of the body usually exposed to the air,—for example, the face, neck, and hands; in the next place, in conformity with physiological laws, on the areola and nipple of the mamma, and on the organs of generation; then, as a consequence of a more irritable tissue, in the axillæ and in the groins; and lastly, in obedience to a pathological law, upon the site of a blister or injury to the skin, where the rete mucosum has not been removed; for as the seat of the pigment is the rete mucosum, the integrity of that structure is necessary to the development of the melasmus.

The author points out that the swarthiness is uniform, although deeper in tint in some situations than in others; that it is not bounded by abrupt lines, like melasma figuratum, but blends by its circumference with the general tint of the body; that its effect is to create a resemblance with the hue of the darker-coloured races of mankind; and that the surface is smooth, having the texture of the normal skin, and not roughened by alteration of the epidermis, or desiccation and desquamation. In a word, the skin performs the excretory office of absorbing the material for the production of the pigmentary matter from the circulating fluids of the body. He lays considerable stress on the presence of longitudinal pigmentary streaks upon the lips and irregular spots on the buccal membrane, and mentions the existence of freckle-like spots on the general surface of the melasmic discoloration.

To illustrate the organic pathology of Addison's disease, Dr. Greenhow, with painstaking industry, has collected 196 reported cases; of which he finds that 128 are genuine examples of the disease, and the remaining 68 uncertain and doubtful, and very possibly not examples of Addison's disease at all. To be the true disease, the tissue of the supra-renal capsules must be infiltrated with, or converted into, a substance very closely resembling, if not identical with tubercle; and although several able observers are opposed to this belief, a greater number exist who have adopted the opinion; "and certainly its very frequent occurrence in persons affected with

tubercle in the lungs or other organs, taken together with the rarity of its association with any other disease, cannot fail to indicate some intimate relation between this particular lesion characteristic of Addison's disease and the tubercular diathesis." The diseased capsules "are generally enlarged, hard, and nodulated; on section they scarcely ever present any trace of distinction between cortex and medulla, or any remains of the natural tissue." "The section is marked by the admixture of two different-looking deposits; one is semi-transparent, firm, and when first cut into, of a greyish colour, rapidly assuming a pinkish hue on exposure to the air; the other is generally seen in the form of irregular roundish, opaque, yellow, or cream-coloured masses, of more or less friable consistence, embedded in the translucent portion. Often various gradations will be met with, intermediate between the translucent tissue and the opaque friable nodules, and sometimes there are harder portions of cretaceous character; sometimes, also, collections of thick creamy fluid;" and sometimes the capsules are shrivelled and contain only this matter, with some cheesy substance or hard cretaceous masses.

According to the above standard, a majority of the eleven cases published by Addison in his work "On the Constitutional and Local Effects of Diseases of the supra-renal Capsules," were of the spurious kind, and five alone Dr. Greenhow allows to be genuine. But we may form a better notion of our author's division by following his grouping of the non-genuine cases. Thus, of the sixty-eight cases in question *ten* presented simple bronzing of the skin, the capsules being healthy; *twenty-four* were examples of cancerous disease of the capsules; *ten* exhibited miscellaneous forms of disease, such as hæmorrhagic effusion, amyloid degeneration, and fatty degeneration; while *twenty-four* were so imperfectly described as to render their diagnosis altogether doubtful.

Of the 128 genuine cases, strumous degeneration was nearly the sole pathological condition present in forty-six, while of the remaining eighty-two the supra-renal disease was complicated in at least *fifteen* instances by vertebral disease or lumbar abscess, nine out of the fifteen presenting tubercle of the lungs; *fifty-seven* were complicated with tubercular disease, namely, twenty-five tubercle in the lungs, nineteen decided tuberculosis, and thirteen phthisis; while *ten* only were without tubercular disease, but presented pathological appearances in the heart, liver, kidneys, and brain. In the same total number of cases the constitutional symptoms were well marked in eighty-three instances, less marked in seven-

teen, and absent in twenty-eight; while the characteristic discoloration was present in eighty-five cases, more feeble in twenty-five, and absent in eighteen.

Such, then, according to Dr. Greenhow, are the symptoms and pathology of Addison's disease; a pathology which remained undiscovered by Addison himself; a degeneration of a tubercular type and very commonly associated with a strumous diathesis and tubercular disease. Our author has in some instances traced the origin of the affection to an existing disease of the bones of the vertebral column associated with lumbar abscess; and sometimes "to the extension of inflammation to those organs from diseased or injured adjacent parts in persons of a tubercular diathesis." Associating the disease with labour, he finds it more commonly in the male than in the female, in the proportion of 92 to 36; "only eight males and three females, so far as can be gathered from the reports, have belonged to the middle or higher classes of society;" while its fatality is confined within the limits of the working period of life.

If we cast back for a short space in the direction of the discovery of this remarkable disease, we shall find that Addison, in 1855, framed his essay on the subject and drew his deductions from the observation of eleven cases; but that in 1866, ten years later, Dr. Greenhow is enabled to bring together the results of no less a number than 196 cases. Addison at the early investigation of the disease would seem to have attached too much importance to the melanic discoloration of the skin; while Greenhow, with the aid of accumulated observation and experience, gives their proper relative value to the two kinds of symptoms which accompany the disease, namely, the constitutional symptoms and the melanopathic. The results which he shows, are: 1. that the constitutional symptoms invariably co-exist with a peculiar form of degeneration of the supra-renal capsules allied with tuberculosis; 2. that a melanic condition of the skin is generally, and indeed almost constantly, associated with the constitutional symptoms; and 3. a melasmic condition of the skin may accompany several forms of non-specific disease of the supra-renal capsules, and altogether independently of the constitutional symptoms. Therefore, he says, to constitute the true Addison's disease, two out of three factors must be present, and these will in general be accompanied by the third. The first factor is the specific affection of the supra-renal capsules; the second, the constitutional symptoms consisting of asthenia and gastric irritability; while the third, which may be exceptionally absent, is the melanopathia.

Testing the numerous cases which have been brought together, by this rule, Greenhow points out that six of the eleven cases reported by Addison were not examples of the true disease, inasmuch as they were deficient in the most important of the factors, namely, the constitutional symptoms; and the same rule applied to the whole collection of cases, gives the results which we have already announced, namely, that out of the entire 196 cases, 128 only are genuine; the remaining 68 being either not genuine or very doubtful.

Looking, however, at these cases in the interests of dermatology, we find that of the 128 genuine cases of Addison's disease, 110 presented a melasmic coloration of the skin; eighteen only being wanting in the second factor to make the case complete. And of the 68 non-genuine cases, accompanied with melasma, all, with the exception of ten, presented a diseased condition of the supra-renal capsules. Moreover, of 177 cases of supra-renal disease, melasma was present in 139 and absent in 38. While in the cases of melanopathia, mistaken for Addison's disease, the supra-renal capsules were found to be perfectly healthy. In these latter, the pathological states to which the melasma might be referred were: disease of liver; tuberculous disease of viscera; syphilis with tubercle; cancer; disease of the heart and lungs; effusion into the serous cavities; affection of the brain; and the sequelæ of yellow fever.

In our judgment, Dr. Greenhow has thrown great light upon the subject which he has undertaken to investigate; he has defined, more accurately than has been heretofore understood, the symptoms of Addison's disease; he has exhibited the importance of careful and accumulated observation as represented in the numerous cases which he has assembled together; he has made out a strong case in favour of regarding Addison's disease as a tubercular affection of the supra-renal capsules; and he has corrected the *melanomania* which looked upon every dark spot in the integument as the sign of a fatal disease. Moreover he has helped the pathology of the skin by showing the direct relation subsisting between irritation of the organic system of nerves, depending on disease of the most humble of the abdominal viscera, and the pigmentation of the skin.

Small-pox and Vaccination Hospital; Medical Report for 1866. By WILLIAM MUNK, M.D., and J. F. MARSON, F.R.C.S.

THE medical officers of this hospital, in addition to their report for the year just past, make a statement of the statistics of the institution during the sixteen years which have elapsed since its opening, and supply us with interesting information as to the epidemics which have prevailed during that period, and especially as to the *existing epidemic* which began in November, 1862, and has continued, not only unabated, but has risen to its highest point during the past year. In duration and numbers of persons afflicted, the present epidemic has "very far exceeded any similar visitation within the memory of the present generation."

Of the sixteen years in question no less than eleven are bracketed as epidemical; the five years representing the sporadic occurrence of variola amounting in the whole to 1,429, while the number of patients admitted into the hospital during the single year 1866 is no less than 2,069; this latter quotation being greatly in excess of any other of the sixteen years, and exceeding the next greatest year (1863), when the numbers amounted to 1,537, by upwards of 500 cases. Looking at these figures, we are led to the conclusion that the epidemical is the normal state of variola, and its sporadical distribution the exceptional state. Thus, embraced by these sixteen years are four epidemics; the first occurring during the two years 1851-2; the second during the three years 1854-5-6; the third during the two years 1859-60; and the fourth extending from the year 1863 to the present time. While the sporadic periods are, in one instance one year, and the two others two years each. In other words, the epidemical state is equal to more than two-thirds of the whole. Thus the sum of the patients admitted into hospital during the five sporadic years was 1,429. The first epidemic, lasting for two years, gave 1,482; the second epidemic, of three years, 2,321; the third epidemic, of two years, 2,060; and the fourth and present epidemic, of four years, 5,691. The yearly average of the first epidemic being 741; of the second, 773; of the third, 1,030; and of the fourth, 1,422.

Season would seem to exert little or no influence over variola. In the years of the greatest abundance of the disease, 1863, 1866, the balance is in favour of the greatest number of cases occurring in the summer; while in the two years

1864 and 1865, the winter has the preponderance. If we proceed in the next place to the analysis of the total number of patients admitted into hospital in 1866, we shall find some interesting facts elicited; for example, from the 2,069 admissions 32 must be deducted as not being small-pox; and of the remaining 2,037, 1,605 had been vaccinated, and 425 were unvaccinated; three had undergone small-pox previously; two had been inoculated; and two had suffered from small-pox after having been vaccinated. Of the three cases of secondary small-pox one was fatal, as was also one of the cases of secondary small-pox after vaccination.

The general mortality of variola is shown to be on the *decrease*; thus, during a period of sixteen years, ending in December, 1857, the number of deaths amounted to 21·38 per cent.; during the first year of the present epidemic the proportion was 17 per cent.; and during the year 1866 only 13 per cent. The favourable influence of vaccination is shown in the fact of the percentage of deaths in the unvaccinated being 35·7 per cent., and of the vaccinated only 6·7. And the reporters ascribe the diminution of general mortality to the increased proportion of the vaccinated over the unvaccinated: thus in the epidemic of 1851-2, the vaccinated were 66·7 per cent. of the whole; in the epidemic of 1854-6 they were 71·2; in 1859-60, 78 per cent.; and in the existing epidemic, 81·1 per cent.

In reference to the vaccination department of the hospital, 338 persons have been vaccinated during the year 1866; and 580 charges of vaccine lymph have been supplied to members of the medical profession.

We cannot take leave of this report without an expression of satisfaction at the manner in which its purposes have been achieved, and of congratulation to the reporters on the successful performance of the duty which they had undertaken. Careful observations, such as those on which this report is founded, are the sole stepping-stones of progress in the furtherance of truth.

Giornale Italiano delle Malattie Veneree e delle Malattie della Pelle. Compilato e diretto dal dott. G. B. SORESINA. Milano.

Italian Journal of Venereal Diseases and Diseases of the Skin. Edited by DR. G. B. SORESINA of Milan.

THE above Journal, the only one, as we believe, in Europe, besides our own, devoted to the special investigation of cutaneous diseases, has entered upon its second year of usefulness. It is a monthly periodical, and two handsome volumes for the past year, and the current fasciculi for the present year are now before us. Among the original articles contained in the latter, we find a paper by Professor Gamberini, on dermatology, aphoristically considered; the annual report of the cutaneous department of the chief hospital of Milan, for 1865, by Dr. Angelo Dubini; an essay on the perchloride of iron in solution, and its application to the treatment of carbuncle, by Dr. Alberti Giuseppe; on the transmission of syphilis by vaccination, by Professor Gamberini; a paper by Dr. Francesco Vigna, entitled Facts and Suggestions in opposition to the doctrine of the darts virus (herpetism) as applied to eczema; and lectures on the theory and practice of Dermatology by Professor Michelacci. Herein it must be admitted are signs of activity deserving of admiration, and we heartily wish our contemporary success.

In the number for May, the editor notices the birth of the JOURNAL OF CUTANEOUS MEDICINE in the following terms:—"A brotherly congratulation to the new periodical, marshalled under the ægis of the most reputed dermatologists of Great Britain." We accept, in the name of our colleagues and of ourselves, this brotherly greeting, and return it with an assurance of our deepest love and respect, and of our determination to do our best to deserve the esteem of all dermatologists as well as of the medical profession throughout the world.

Du Traitement des Maladies de la Peau par les Eaux sulfureuses de Baréges. Par M. E. LE BRET, M.D. Paris, 1867, pp. 32.

On the Treatment of Diseases of the Skin by the Sulphureous Waters of Bareges, &c.

BAZIN denounces sulphur, and especially sulphureous waters, in the treatment of diseases of the skin, and recognizes a certain utility in the use of the waters of Bareges only in

the instance of scrofulous affections. He divides diseases of the skin into three groups,—dartrous or herpetic, arthritic, and scrofulous, and in the last alone he acknowledges that some benefit may accrue from the sulphur treatment, but in it, only in its declining or chronic stage. Dr. Le Bret, the medical inspector of the spas of Bareges, and secretary of the Hydrological Society, very naturally raises objections to this doctrine of St. Louis as represented by Bazin, and adduces the practice of the spa of Bareges in proof of the advantages of the sulphureous waters in most forms of chronic cutaneous disease. He makes a very unnecessary division of the diseases in which the waters are useful, into moist, dry, and ulcerous; moist signifying little more than eczema; dry, the *lepra alphas* of the Greeks; and ulcerous, scrofuloderma; the phytiform diseases and the syphilodermata being especially excluded. He admits that the waters are calculated to be serviceable in scrofula, but declares that they are equally beneficial in the arthritic and herpetic darts of Bazin, when they have entered upon their chronic stage; while over *lepra alphas* they have a special influence.

The waters of Bareges are thermal and highly charged with sulphur, and the spas are situated in a mountainous country, among the spurs of the Pyrenees. The waters are taken internally, and applied externally in the form of bath and douche, and the prescribed duration of treatment is not less than six weeks. It is clear that such a treatment must be alterative and stimulant in its internal exhibition, and stimulant, and derivative or “substitutive,” when used externally; and it must be equally obvious that only such states of the constitution or such forms of disease as would be benefitted by a stimulant, alterative, and derivative treatment, are likely to obtain any advantage from the sulphureous waters; while these will in all probability be certainly and speedily cured. On this argument rests the whole truth of the controversy between Bazin and Le Bret. Bazin, without special experience, advances his own theory of the case; Le Bret, without admitting the theory, states the facts resulting from observation: the medical theorist may be inclined to side with the learned dissertation; the patient will pack up and be off to Le Bret, because a learned squabble offers no interest to him,—he simply seeks to be cured of his disease.

A careful inquiry into the constitutional causes of eczema, made by ourselves a few years back,* led us to the conclusion

* An Enquiry into the Relative Frequency, the Duration and Cause of Diseases of the Skin. Churchill, 1864.

that the three principal of such causes were debility of *nutritive*, *assimilative*, and *nervous* power. A similar train of thought, doubtless, gave origin to Bazin's division of cutaneous diseases into *scrofulous*, *arthritic*, and *herpetic*; scrofulous being allied to nutritive, and arthritic to assimilative; while we are quite ready to admit an eczematous diathesis as the parallel of his herpetic dartre. By scrofulous, as used by Bazin, is not to be understood the affection of the glands which we recognize by that name, but simply a state of nutritive debility analogous to the state denominated lymphatic by Devergie. To the superficial observer, these differences of expression may be taken to mean differences of opinion; whereas, it is clear, that the honest searchers after truth, although unseen by each other, cannot be far apart; and that the essential differences between them are not differences of idea, but merely in the garb of language in which that idea is presented.

Thus, theory apart, Bazin acknowledges that certain forms of cutaneous disease that can support the treatment may be benefitted by its use; Le Bret maintains the same opinion, but proves that the diseases which may be so benefitted, occupy a wider field than that admitted by Bazin, but are nevertheless chronic, indolent, and obstinate affections. While we, with the principle of treatment before us, are enabled to express a decided opinion, that under certain circumstances and in certain cases, the sulphureous treatment must be highly useful. This treatment has the advantage of being active, and being susceptible of modification; and it is not pretended that it should be exclusive. General indications of disorder of function must be regulated by general means; and such regulation being complete, the specific treatment may be adopted and carried out under the guidance of those who are experienced in its use. We can easily understand that an alterative stimulant treatment is not applicable to acute affections, or to exacerbations of a chronic affection; but in the chronic stage of the former, and the indolent stage of the latter, an alterative stimulant treatment is perfectly correct, whether it be put in practice at home or at the spas. The author reminds us that the derivative, or, as he terms it, the "substitutive" effect of the treatment is often manifested by the production of an eruption of boils, which not only relieve the local disease, but tend to remove the *causa mali* present in the constitution. And he affirms, with sound judgment, that the permanent cure of the disease is in many instances, as in lepra alphas, brought about by successive excitation of the local affection.

There is one element of treatment, however, which has hitherto been omitted from consideration, and is not alluded to by our author, namely, the *tonic* element. In our practice in cities this element occupies a leading place; the very announcement that diseases of the skin originate in debility, prepares us for the prescription of a tonic treatment and a tonic regimen. Dr. Le Bret alludes to the exacerbation that sometimes results from the excitement and fever of travel and fatigue, but he does not mention the probable tonic effects of a mountainous atmosphere, change of air, exercise, tranquillity of mind, cheerful anticipation of cure, and wholesome diet. In cities these good words are represented by quinine, iron, bitter infusions, nitro-muriatic acid, &c.; but they are a needful addition to our alterative stimulant treatment, and without which all our efforts would be vain.

The cutaneous diseases which Dr. Le Bret believes to be suited for the sulphureous treatment are chronic eczemata, lepra alphas, pityriasis, acne, and furunculus. He details a few cases, with a view to the contradiction of Bazin, which make us at home with the kind of disease which comes before him, and very justly denies that scrofula enters for any part into their history; while they confirm us in the opinions which we ourselves entertain. His first case is that of a girl of 19, of lymphatic nervous temperament, and irregular menstrual function, affected with eczema for eighteen months, the disease assuming the crusted form (*impetigo granulata*) on the scalp, and the ichorous form behind the ears. After thirty-five baths, the internal use of the waters, and exercise on the mountains, she was completely cured. A second case was that of a lady of 35, recently confined, and covered from head to foot with eczema pustulosum. She was of lymphatic temperament, and had suffered at twelve years of age from eczematous eruption. After nine weeks of treatment with the waters, and the use of cod-liver oil, she recovered, but experienced a relapse the following year. Another case, that of a young woman aged 17, of lymphatic, nervous temperament, and of eczematous parentage, who had been afflicted with eczema for nine years, was cured after forty baths; but the disease returned in the winter, and was repeated for several years. Where, says Dr. Le Bret, is the evidence of scrofula in these cases? and yet these are a fair sample of a majority of the whole.

Again, in answer to Bazin's allegation, that the sulphur treatment is injurious in the arthritic constitution, Le Bret relates a case of chronic eczema associated with arthritis, which displayed, in a most marked manner, the beneficial ope-

ration of the waters. In truth, he need not be frightened with theory, when practice and experience in his accustomed remedy prove so much in his favour. The sulphur-water treatment is undoubtedly of great value in a certain group of cases; and although we believe that those same cases might be equally well cured by other means, we must not consider slightly the treatment in question, when unopposed by other and weightier considerations. We allude especially to chronic eczema, which the author says constitutes at least half the cases which seek for treatment at Bareges; while the next largest group, namely, *lepra alphas*, finds at the sulphureous spas its best and most active remedies. In cities we treat *lepra alphas* by means of arsenic internally, and sulphur and tar in connection with baths externally. At Bareges, says Dr. Le Bret, patients afflicted with this disease support the strongest waters, both internally and externally; and he further observes that he had derived great success from combining, with a course of the baths, the internal administration of arsenic. We believe him thoroughly, and feel assured that such a treatment embraces the happiest combination.

In conclusion, we have to thank Dr. Le Bret for his excellent essay, and to venture a hope that he will take the first opportunity of shaking hands with his distinguished opponent. As a looker-on, we do not discover that there is much difference between the combatants, and we owe them both an expression of gratitude for the opportunity of deducing a practical moral from their friendly antagonism.

Editorial Commentary.

CULTURE OF DERMATOLOGY.

A RECOGNITION of the importance of the study of Dermatology is fast gaining ground in our Medical Schools. Some few of our London Hospitals, with a view to perfecting the knowledge of the student of medicine to the utmost extent in their power, have long had a department of Dermatology ; such are, that of University College, the inspiration springing from Dr. Anthony Todd Thompson, with whom diseases of the skin were a favourite subject of investigation, and ably carried out by his successor, Dr. Jenner ; and that of Guy's Hospital, wherein the study was promoted by Dr. Golding Bird, Dr. Addison, and Dr. Gull. It is now announced that similar dermatological departments have been established in the London Hospital, under the direction of Mr. Hutchinson and Dr. Sutton ; in St. Bartholomew's, under the guidance of Drs. Southey and Andrew ; and in St. Mary's, under that of Dr. Handfield Jones. It has been mentioned, also, that St. George's Hospital and Charing Cross Hospital are about to follow the same worthy example. Certainly, no greater boon could be conferred on the student, the practitioner, and the public, than such institutions. Too frequently the student completes his curriculum without having seen a case of eczema, without being instructed in the distinction between an idiopathic and a symptomatic or a syphilitic eruption. All his knowledge of cutaneous diseases is acquired during his apprentice life, and the rudest notions of scabies and psoriasis, of sulphur and arsenic, are all the information which he possesses. How soon, when armed with his diploma, may the first case which comes before him to test his ability, be an eczema, let us say an eczema infantile ; upon his treatment of that case, under the observation of an anxious and intelligent mother, may his reputation and his future depend. Herein is his argument for seeking a knowledge of cutaneous diseases, and herein is a reason why the professors of the schools and the medical officers of hospitals, should in their consideration for the interests of their pupils, seek to provide

them with the knowledge which they require. We cannot put before gentlemen the paltry motive of making their school popular; and yet such a department *would* make their school popular. We cannot expect that highly educated men would be influenced by those motives of competition which regulate our trades or our omnibuses; and yet those schools would carry a fairer and a fuller freight of students, which should in their philanthropy secure a more complete education to the rising members of the profession. We would not speak to our hospital officers of their duty, for they can understand and appreciate their duty as well and even better than ourselves; but we would appeal to them, we would supplicate them, to confer this benefit on those who come to them in confidence for their instruction and education. We can remember once hearing a heartless joke, which we will not believe to have ever been real, that was practised on a poor student, who asked information with regard to a cutaneous disease, from a distinguished hospital physician. "Sir," was the reply, "I know nothing of skin diseases, you must go to the surgeon;" and when the student did go to the surgeon, he was met by a rebuke, and told that he must seek his knowledge at the hands of the physician. It is true that this anecdote related to a bygone time; and it is on that account that we feel a pleasure in contemplating the present, and still more the future; for we perceive that medical men are about to escape the imputation often too truly bestowed, of being utterly ignorant of cutaneous diseases. Such an imputation, whether true or false, leaves a large and important branch of medicine open to the trespass of the impostor and the quack. And yet why should not the impostor and the quack flourish, if the profession think it beneath its dignity to supply the knowledge which would at once put an end to the evil. As British men we must never forget that we have had our Willan—Willan, who in the cold shade of our hospitals has given a glory to the medical profession of England; and we may add, that equally without the encouragement or help of the hospitals, Britain does not at this moment stand second in the councils of dermatological medicine of Europe.

THE NEW BLACK DEATH.

THE BLACK DEATH or black plague, which, within the last year and a half has made its appearance in Dublin in an epidemic form, has vindicated its right to this singular appellation by its resemblance, in certain of its symp-

toms, to the black plague of the fourteenth century. In its character it is a malignant form of fever, allied in some respects with typhus, rapidly and generally fatal, accompanied with an exanthem, commonly assuming the form of petechiæ and ecchymoses, and frequently with symptoms of cerebro-spinal irritation, which *post-mortem* examination has shown to proceed from cerebro-spinal meningitis, sometimes affecting the brain and its meninges chiefly, and sometimes the upper part of the spinal cord. Dr. Stokes suggests as an appropriate name for the disease, *malignant purpuric fever*; but besides this it has already received a variety of designations; for example, *cerebro-spinal typhus*, *black fever*, *purpura maligna*, *cerebro-spinal meningitis*, *cerebro-spinal arachnitis*, &c. Although new to this country, it would seem to have been known in America for a number of years. It made its appearance in Ireland as a forerunner of cholera, and likewise at the close of the recent epidemic of the latter disease. It is remarkable for its rapid course, sometimes terminating in death in the course of a few hours, from five to eighteen, frequently lasting four days, and occasionally running on to fourteen or sixteen; for its great fatality; for the porphyritic exanthem by which it is accompanied, and which appears in a few hours after its invasion; for the asthenic condition of the circulation and dyscrasia of the blood; for the low temperature of the body; and for the early development of symptoms of cerebro-spinal irritation. Its contagiousness is more than surmised, but not yet satisfactorily established. Unlike the Black Death of the Middle Ages, there is no pneumonia, no epistaxis, no hæmatemesis, and time is not given for those secondary changes which result in buboes and boils. Nevertheless, the new epidemic is to be viewed with suspicion, and the anxious attention bestowed upon it by our colleagues in Dublin will doubtless add to our information as to the best method of controlling the disease.

In the case recorded by Dr. Belcher, of Dublin, the disease was insidious in its progress, and tardy in its destruction of life; but the dyscrasia of the blood was made manifest within a few hours after death, by extensive ecchymoses on the skin, the pouring forth of an abundant flow of sanguineous fluid from the mouth, and by the production of a foetid odour, which calls to our remembrance the putrid inflammation of the lungs and mephitic exhalations from the victims of the disease in the fourteenth century—exhalations which spread contagion not only among men but also amongst the domestic animals, and were the cause of death of 90 per cent. of the population. Nevertheless, the present epidemic, although sus-

pected, has not yet been proved to be contagious, and we hope sincerely will evade that dangerous complication. Disease always presents varieties of manifestation for which many causes may be assigned. The present epidemic also exhibits such variations, as did its ancient prototype of the fourteenth century; in some places the Black Death, where it was not instantly fatal, as though by lightning, was ushered in with bleeding of the nose, with hæmoptysis and sometimes vomiting of blood; while in other places the buboes in the groins and armpits—the so-called pest-boils—first made known the fatal hold which the disease had taken of the circulating and lymphatic system. In the epidemics of Avignon, recorded by that grand old medical hero, GUY DE CHAULIAC, who stood to his post when deserted by all who had the power to flee, the first, lasting from January to August, 1348, attacked chiefly the poor; while the second, commencing in the autumn of 1360 and continuing for nine months, was remarkable from its seizing on the upper classes and children, women for the most part being spared. The rapidity of contagion of the black plague was most astonishing; “even the eyes of the patient,” writes Hecker, “were considered as sources of contagion, which had the power of acting at a distance, whether on account of their unwonted lustre or the distortion which they always suffer in plague, or whether in conformity with an ancient notion, according to which the sight was considered as the bearer of a demoniacal enchantment. Flight from infected cities seldom availed the fearful, for the germ of the disease adhered to them, and they fell sick, remote from assistance, in the solitude of their country houses.” *

RUBELOUS EPIDEMIC OF THE SPRING OF 1867.

SEASONS, in their influence over the development and modifications of disease have been noted from the earliest ages. Hippocrates devoted a book to the consideration of the subject, and our master WILLAN has recorded the result of his observations in his Nomenclature. Thus we have a roseola of the summer, *roseola æstiva*, and a roseola of the autumn, *roseola autumnalis*. Most of all, probably, among the fugi-

* The Epidemics of the Middle Ages, from the German of J. F. C. Hecker, M.D.; translated by B. G. Babington, M.D., F.R.S., 1844, for the Sydenham Society.

tive diseases of man are the modifications presented by the exanthemata, and especially by rubeola. Rubeola not unfrequently descends in the scale of severity, until we find it merging into that slighter affection roseola; and one of the admitted forms of roseola we are in the habit of describing as "*false measles*." The term rubeola notha was a happy suggestion of the late president of the Epidemiological Society, Dr. BABINGTON, and we have frequent occasion to call his observations to remembrance.

In the month of April just past we were consulted on several occasions in cases of rubeola notha. Several of our medical friends were seeing similar cases at the same time; and we learn that in Sunderland the exanthem assumed characters which led to its being regarded as a scarlatina notha. In every instance the symptoms were of the mildest possible character; but, nevertheless, were sufficient to lead to apprehension of the presence of the graver malady, and therefore to the demand for the opinion of the medical authority. The following are the main features of the cases which have fallen under our own observation:—

An exanthem of dull red crimson colour appearing first on the face; in twenty-four hours extending over the entire body, from above downwards; lasting *two* days; and subsiding without exfoliation of the epidermis. *Preceded* by slight symptoms of catarrh or rheumatism of one or two weeks' continuance; *accompanied* with very slight febrile disturbances; no thirst, sometimes a coated tongue; and ending with a little debility.

Exanthem punctulated, uniformly distributed, interspersed with papulæ, and here and there a red base uniting the puncta into irregular blotches of small extent; features a little swollen; conjunctivæ sometimes suffused; eyelids stiff, with slight intolerance of light lasting for a day; no congestion of fauces; sometimes congestion of gums, with a little tenderness of the submaxillary glands. No loss of appetite, sickness or constipation. Sudden appearance of the menses at the height of the exanthem, as in rubeola.

The patients were young persons of both sexes; in one instance two sisters, the daughters of a medical man.

Clinical Memoranda.

STRIÆ ATROPHICÆ MINIMÆ.—Since our paper on *Striæ atrophicæ* was sent to the press, another case has presented itself which offers a notable variety in the form of the disease. The *striæ* are narrow and parallel, about a line in breadth and a line apart, and are situated on the outer side of the forearm, from the wrist to the elbow, and occupying about one half the circumference of the limb. They have the character of the *maculæ atrophicæ* previously described, being very slightly depressed, smooth, and pale, and are deepened by drawing the skin together; moreover they are straight, being neither curved nor undulated. On a superficial inspection, the skin exhibits a very remarkable appearance, the arms looking as if they were printed with a pattern of fine stripes; the cuticle is for the most part smooth, but is slightly roughened and broken upon some of the ridges; on the *striæ* the papillary layer of the corium is absent, and the follicles are more apparent than on the rest of the skin.

The subject of this curious affection is a lady, 35 years of age; whose nervous system has received two serious nervous shocks, besides other minor, but nevertheless sufficiently grave ones. The first shock dates back twelve years, and proceeded from a railway accident; the second occurred seven years ago, and resulted from exposure to the cold during the night, in a half-dressed state and during menstruation, while her home was being burned to the ground. From the latter date she traces the singular marking of the skin of her arms, as also a state of *teleangiectasia* of the cheeks, and a condition of *hyperæsthesia* of the face, which feels as if it were skinned when exposed to a cold wind, particularly an easterly wind.

The influence of nervous shock is shown in this case more in its effects upon the sensory and trophic nerves of the skin, than upon the organic system supplying the viscera; and there existed no tendency to pigmentary change.

ALPHOS PUNCTATUS.—A young married man, aged 24, has a papular-looking eruption scattered profusely over the back as low down as the loins, in a less degree on the front aspect of the trunk, the limbs, the scalp, and the face. The eruption began a week ago, by a few spots, and has increased rapidly, so that at the present time the whole back is covered with spots, many being only an eighth of an inch apart, while the largest unoccupied space measures scarcely more than an inch. The spots are circumscribed, developed around the apertures of the follicles, flat or scarcely perceptibly raised, have a yellowish-red or salmon colour, are smooth on the surface, and range in size from a mere point to the eighth of an inch in diameter. In half a dozen out of the whole number of spots on the back there is the appearance of a thin glistening scale; two or three are discoloured by the desiccation of

effused blood, showing that they have been torn by the nails ; and scratches made by the nails are also perceptible on the arms, denoting the presence of pruritus. On the lower limbs, besides the ordinary flat spots, there are a small number of papulæ capped with small white scales (*alphos papulosus*). The most irritable part of the eruption is that on the scalp, but it presents the peculiarity of being itchy during the day ; while that of the trunk is itchy at night, but only the last two nights. On the face the eruption also presents the spotted character, and where some of the spots have become blended, so as to form a patch of irregular shape, the surface is covered with thin furfuraceous scales, and is consequently pityriasic (*alphos pityriasicus*). Furthermore on the elbows and knees are irregular patches of *alphos vulgaris* which have occupied their present position three years.

The diagnosis of this case would have been difficult for any but a practised eye. The first impression was that of a syphilitic eruption, and that had probably been the idea of the surgeon who sent the patient to us, for he had prescribed for him the iodide of potassium. The tendency to form thin scales was not inconsistent with a syphiloderma, but then there was evidence of pruritus, as shown by the effects of scratching, and syphilodermata are not pruritic. The eruption was not so well defined as a papulous syphiloderma would have been,—it was neither papular nor tubercular ; but the spots were evenly scattered over the surface ; while a papulous or early tuberculous syphiloderma would have been more or less corymbous. Again, a syphiloderma would have been more abundantly distributed over the ventral aspect of the trunk than upon its dorsum ; and there were no corroborative syphilitic symptoms, such as sore throat, swollen glands, or neuralgic pains. Finally, there was the well-defined and long-established eruption on the elbows ; which was not mentioned by the patient until we made personal search for it, on determining our diagnosis. The patient explained that he did not allude to it, because he considered the new eruption a new disease ; and that that on the elbows and knees was become habitual.

We would ask the student of cutaneous medicine to compare the appearances presented by the above case with the case reported in the first number of this Journal (p. 114) under the name of *alphos papulosus* ; in the case referred to the eruption consisted of “ prominent pimples, exactly resembling the papules of lichen, surmounted by small glittering white caps of spongy epidermis ; ” in the present case there was no elevation, and an absence of scale, although a thin scale will probably form subsequently ; but the thickness of the scale is generally proportionate to the degree of infiltration of the tissues and consequent thickening ; hence, when there is no elevation and little thickening, the eruption offers a mere furfuraceous desquamation like that of pityriasis ; hence the term *alphos pityriasicus*. In employing such terms as “ punctatus,” “ papulosus,” and “ pityriasicus,” the reader must not accuse us of multiplying names : these words are the simplest means of expression of the character of an eruption of *alphos vulgaris* ; which may, as we see, be a red point without elevation ; or it may be spread out to larger dimensions, and covered with a light furfuraceous scale, but still without elevation,—*alphos pityriasicus* ; or it may rise up in bold prominence as in the papular, the tubercular, and the nummular forms of the disease. Again,

this case illustrates a *general*, almost an *acute* eruption ; as well as the *local*, the *figured*, and the *chronic* form.

Nevertheless, whether we designate the case according to its appearance *punctatus* or *papulosus*, it is none the less a common *alphos*, *alphos vulgaris*, and the treatment must be the same whatever accidental form it might assume. The only conditions that could alter a fixed mode of treatment would be its acute or febrile accompaniments or its complication with other constitutional disturbance. In either case, the constitutional complications must be relieved before the specific treatment is commenced ; but all complication at an end, we should prescribe arsenic internally, in doses ranging from two to five minims, three times a day ; and active frictions locally with an ointment composed of equal parts of *unguentum picis* and *unguentum sulphuris*.

NÆVUS FOLLICULOSUS.—*Nævus*, apparently derived from *nativus*, a *natu*, a natural mark, is commonly used in the sense of a congenital mark ; although instances are far from infrequent in which the mark is acquired or accidental, as in the case of some of the *nævi vasculosi*, and notably, *nævus araneus* and *nævus sanguineus*. The term *nævus* is commonly applied to vascular, pigmentary, areolo-fibrous, and pilous formations ; and to these we propose to add another, which has lately come under our notice, and which consists in hypertrophy of the sebiparous glands and follicles, associated with a state of atrophy of the corium.

On the cheek of a young lady, aged 14, are two small oblong patches, the largest measuring half an inch in length, by a quarter of an inch in breadth ; they are flat, or very slightly raised, and of a yellowish-white and greyish colour ; and on close examination are found to consist of an aggregation of hypertrophied sebaceous glands, each distinguished by an enlarged follicular aperture, surrounded by the lobules of the gland ; and embedded in a loose areolar connective tissue, scantily supplied with blood-vessels ; the breadth of the separate glands being two lines, and their number in the upper patch ten or twelve, in the lower five or six. The patches naturally cause some degree of deformity ; they have existed from birth ; but during the last six months have increased in prominence, probably in consequence of the impetus given to the development of the cutaneous glandular system by the changes consequent on puberty.

Nævi in general are found to belong to the group of hypertrophic affections ; such, for example, is *teleiangeiectasia*, or vascular *nævus* ; *spilus*, or pigmentary *nævus* ; mole, or tegumentary *nævus* ; and also pilous *nævus* ; and the follicular *nævus* must be regarded as belonging to the same group, inasmuch as there exists a state of hypertrophy of the sebiparous glands, although, from the defective structure of the skin in which they are embedded, there is no equivalent augmentation of secretion. It is clearly an error of development, in which certain parts of the skin are in excess and others are deficient. For example, while the sebiparous glands and loose connective tissue are in excess, the papillary layer of the corium, the capillary network supplying that layer, and the proper white fibrous web of the corium are deficient. Hence we may look upon the physiological condition of the *nævus* as one of defective development, and as belonging rather to erroneous

development than to hypertrophy and atrophy, or to excessive and deficient growth. And this view is corroborated by the fact, that although the sebiparous glands were larger than usual, they were soft and flabby in structure, and incompetent to the performance of healthy function.

But whatever conclusion may be arrived at with reference to the nature of the affection, it is clear that it must be regarded as abnormal and as a deformity, and on this account it is submitted for surgical treatment. We touched it with a solution of potassa fusa in an equal bulk of water, with the object of destroying, in depth, so much of the abnormal skin as was occupied by the glands; and we expect that when the eschar falls, the whole of the glandular tissue will be removed, without interference with the deeper fibrous structure on which we depend for the formation of the cicatrix. We apprehend that no question can arise as to the propriety of the treatment. The nævus was a deformity, and one liable to increase; while caustic would effectually remove the abnormal structure, and with the promise of little succeeding inconvenience from the cicatrix. Moreover, inactive glandular tissue is apt to degenerate, and some more serious consequence might result from permitting it to remain.

BLACK DEATH.—Our Irish brethren have revived an old and frightful term for a no less frightful disease which has latterly been prevalent in Dublin. The present affection is a malignant purpuric fever (Stokes), and resembles in some of its features the “black death” of the fourteenth century, recorded by Hecker, having received its name from a deep purple discoloration of the skin that takes place at an early stage of the fever, and sometimes after death. Dr. Lyons speaks of its “irregularly-shaped, dark-purplish patches, . . . with a general dusky-purplish discoloration of the intervening skin.” Dr. Belcher, referring to a patient under the treatment of Dr. Banks, says:—“On the third day he was discoloured with violet staining of the skin on various parts of the body, but without extravasation.” Dr. Banks mentions “the deep discoloration of the skin as a strange and peculiar feature;” and Dr. Little observes: “the advent of the disease was marked by a dusky discoloration, its progress by deeper tinting, and by the development on the face, hands, and feet, of broad dark patches, which as the disease advanced became more intense in colour, and at its termination resembled the bruises of a hammer.”

Dr. Belcher’s case, published in *The Medical News and Circular* for May 1, 1867, is as follows:—A young lady, of nervous temperament, two days over her proper menstrual period, was exposed to cold weather, and seized with faintness. The menses appeared immediately after this attack; but as she felt weak, she remained in bed, and after two days sent for the doctor, who discovered little more than a state of constipation which was habitual. A few days later she was seized with vomiting, at first bilious, then green; but there was no tenderness of epigastrium. Her tongue was red at the edges, patchy in the centre, but moist; she had constant pain in the frontal region of the head; her pulse ranged from seventy-six to eighty-four; and her skin acted naturally; her only distressing symptom being weariness and pain in the back and limbs. As the sickness subsided, she was attacked with a spasmodic cough; and sometimes the cough caused expulsion of the contents of

the stomach. By degrees these symptoms subsided, and she so far improved as to leave her bed for the sofa, and on one occasion was carried down stairs.

On the eleventh day from her first attack she was seized with numbness of the whole of the left side. This was followed by occasional fits of vomiting ; her skin became sensitive to the slightest touch ; her head was drawn to one side ; she believed she had lost the power of opening her mouth or swallowing ; and she was indisposed to change her position in bed. In the next place, she became attacked with convulsive movements ; threw her arms about ; complained of the weight of the bedclothes ; pushed them away ; caught at imaginary objects ; grasped her throat as though she feared suffocation ; and was occasionally delirious. Her bowels were often constipated, and for a short time there was suppression of urine. Nevertheless, the circulation was tranquil, her skin natural, the pain in the head had ceased, but she had become sleepless.

Three days after the above exacerbation of symptoms, the fourteenth from the commencement of the disease, after a sleepless day, delirium suddenly increased ; sickness having completely subsided. The following night she was harassed with noisy delirium : her pulse beat 120 in the minute, and the pupils were dilated. A physician called to her this night found her grasping her throat, unconscious, and her jaws fixed with trismus ; and in this state she died.

The total duration of the illness was sixteen days ; the greater number of similar cases lasted four days. One example is mentioned of death in five hours ; another in fifteen hours ; while others have been prolonged to three and six weeks.

Dr. Belcher failed to procure a *post-mortem* examination, but gives the following account of the subsequent appearances presented by the body. At the time of death there was no discoloration whatever ; but eight hours later, the face, hands, legs, and the whole of the back were dark purple and almost black. The hands were convulsively closed, the right foot convulsively inverted and the eyelids drawn open. The abdomen was enormously distended, black blood of a highly offensive odour issued from the mouth, and continued to flow out during the day ; and owing to some contraction of the abdomen the quantity of this fluid was increased during the night. On the second day there were purpuric blotches on the face, the face was excessively swollen, and decomposition proceeded so rapidly, although the weather was cold, that it became necessary to close the coffin.

Dr. Mayne, writing on the *black death* in 1846, describes its pathology as an acute inflammation of the membranes of the brain and spinal cord, and especially the arachnoid, the cerebral and spinal substance being apparently sound. The disease makes its attack suddenly without premonition ; it begins with abdominal pain, vomiting and purging ; the extremities are cold and blue, the pulse reduced to a thread, and the general character of the symptoms like those of cholera. Reaction takes place in a few hours, when the muscular system becomes rigid, the head is drawn back and immoveably fixed ; there is twitching of the muscles of the face, and loss of power of the limbs ; the surface is hot ; the pulse full and frequent, ranging between 120

and 140 ; sickness continues ; there is tenderness of the epigastrium and insatiable thirst. Sometimes there is a state of general muscular convulsion, at other times the patients are semi-comatose ; they moan and grind their teeth. The coma increases ; the pulse is slow and laboured ; speech and deglutition fail ; the bowels act involuntarily, and the patient dies. In some cases there is much pain in the head, heat of scalp, congestion of conjunctiva, with intolerance of light and strabismus ; in others there are no such symptoms. Some are sore all over, wincing upon the slightest touch, fearing to change their position in bed ; while others lie in a state of stupor, and are almost insensible : irregular and laboured respiration is a common symptom. Thus it would appear that in some instances the gastric symptoms are the most urgent ; in others the cerebral symptoms, and in others the spinal symptoms. The changes after death would seem to result from a continuance of action of the muscular system for a certain period after the exhaustion of the cerebral and organic nervous system.

A correspondent of the *Medical Gazette* (May 25th) reports the "Black Death" to be an adynamic fever of the nature of typhus, and terms it, in accordance with that view, *cerebro-spinal typhus* ; he remarks, however, on certain points of difference, for example, the early appearance of the exanthem, and where life is sufficiently prolonged, the conversion of the livid ecchymosed blotches into gangrenous sloughs which may destroy life by constitutional irritation. In one instance the purpuric spots were developed on the skin in a few hours after the invasion of the disease. Another striking feature of the fever is the early appearance of pus or degenerating lymph on the surface of the brain and upper part of the spinal cord.

In a case which proved fatal in five hours,—the most rapid heretofore observed, abundant deposits of this kind were observed ; whereas, in another fatal case, occurring at sixteen hours, there existed only a slight degree of congestion of the substance of the brain with serous effusion. As in other instances of sudden death, the blood in the heart and pulmonary vessels is found to be dark and fluid. Contagion is thought probable, but remains as yet an unsettled question. The *Medical Gazette* also notices the case of a man who was seized with shivering, pain in the head and pyrexia in the morning, was spotted over with livid blotches by the middle of the day, became comatose in the afternoon, and died at midnight. In his case the substance of the brain was found to be congested, there was a layer of lymph on the arachnoid, and fluid in the ventricles.

This malignant purpuric fever is especially remarkable for its rapid and fatal course ; the early appearance of the purpuric spots and ecchymosed blotches ; the cerebro-spinal symptoms ; weak pulse ; and low temperature of the body. Unlike typhus, there is an absence of gastro-intestinal affection ; and it attacks the young, the strong, and the well-fed as readily as the aged, the poor, and the starved. Nevertheless, in one instance, among a regiment of soldiers it was preceded by several cases of true typhus. The principal varieties that have been noticed in the course of the epidemic, are : its occurrence with high fever, hot skin, and severe headache ; its sometimes accompaniment of vomiting, constipation, or diarrhoea ; its sudden fatality from poisoning of the nervous centre ; cerebral apnoea from effusion ; asthenia and coma.

With reference to the exanthem or eruption, Dr. Stokes remarks that in rapidly fatal cases, the appearances manifested by the skin are petechiæ, which quickly spread into ecchymoses; sometimes so speedily that in a few hours the entire arm and greater part of the breast of one patient was completely black. In less rapid cases, the exanthem consists sometimes of slightly elevated *papules* of a dusky-red colour, which quickly become black; at other times of circular *rings* or crescentic segments of circles; in every instance running on to ecchymosed blotches. Occasionally, *vesicles* and *pustules* are disseminated among the petechiæ and maculæ, while on the ecchymoses, the cuticle is sometimes raised into a bleb. Thus we find, in this terrible fever, most of the primary lesions of the skin to be represented; there are stigmata and petechiæ, papulæ, vesiculæ, pustulæ, bullæ, and ecchymoses.

Miscellaneous Memoranda.

OUR CONTEMPORARIES.—*L'Union Médicale* mentions the appearance of the first number of the JOURNAL OF CUTANEOUS MEDICINE. This speciality, it observes, is so ably cultivated in the country of Willan and Bateman, that the bare announcement of the publication of a Journal devoted to cutaneous medicine was immediately followed by contributions from the three parts of the kingdom, as well as from the colonies. We notice, as especially deserving of remark, a paper on the presence of an excess of urea in eczema, and a beautiful photograph of a case of "molluscum simplex," observed in Jamaica. Without pretending to the elegance and artistic merits of the new *Clinique Photographique de l'Hôpital St. Louis*, this Review, handsomely printed on tinted paper, and embracing 120 pages octavo, is well worthy of the subscription of all those who are interested in the study of cutaneous diseases.

The *Clinique Photographique de l'Hôpital St. Louis* is a publication in quarto, of which two fasciculi have already appeared, each fasciculus containing four photographic plates. It is edited by A. Hardy and A. de Montmeja; and if faithfully executed, will be a valuable addition to dermatological bibliography. The scheme is to produce a complete atlas applicable to every work on cutaneous diseases, whatever the special doctrines of the author. The photographs are coloured, a questionable advantage, and a description with an appropriate commentary from the pen of Hardy, will accompany each case. The proposed arrangement of subjects will be as follows:—1. Deformities; 2. Inflammatory diseases; 3. Artificial inflammatory diseases; 4. Parasitic affections; 5. Gangrenous affections; 6. Hyperæmiæ; 7. Hæmorrhagiæ; 8. Hypercriniæ; 9. Neuroticæ; 10. Febrile affections; and, 11. Symptomatic diseases, comprehending dartrous, scrofulous, syphilitic, pellagrous, leprous, and cancerous affections.

SUDDEN BLANCHING OF HAIR.—Our views in relation to the cause of sudden blanching of the hair, founded on a remarkable example of alternate

coloration of that structure, reported to the Royal Society in March (21st), have received unexpected corroboration from the following observations of Dr. L. Landois, of Greifswalde, published in Virchow's *Archiv* for April, 1866.

Many tales are recorded of the sudden blanching of the hair ; among which are those of Ludwig of Bavaria, Thomas More, Marie Antoinette, and a young Swiss who had been engaged in a death-struggle with a vulture. S. G. Vogel narrates that his own hair became grey in a single night, from the intense sorrow which he experienced at the death of his sister. The authors of these stories are Nicolas Florentinus, Shenck, Borellus, Turner, Coelius Rhodiginus, &c. ; they were discredited by men of science from their seeming improbability, and Haller went the length of declaring that a sudden change of the hair to white was impossible. Professor Masler, Dr. Landois, and Dr. Lohmer, however, saw a man suffering under delirium tremens, in the hospital at Greifswalde, in whom the hair turned grey in the course of one or two days ; the man was highly nervous, and easily frightened by the slightest noise. Dr. Landois remarks that the hair owes its colour to the presence of pigment in the fibrous or cortical portion. Vauquelin attributes the colour to an oily fluid ; and the whiteness of the hair of the Albino is due to the absence of pigment, and the presence of air in its deeper layers. But any kind of hair may turn grey, but never perfectly white, by the development of air in its deeper layers. The greyness of age is produced by loss of pigment ; while sudden greyness is the consequence of the formation of air in the medulla, and sometimes also in the cortical portion, without interference with the natural pigment. In the case narrated by Landois, there were many hairs which were only partially altered by the presence of air ; the remaining part retaining its black colour ; and he mentions that he has met with some instances in which the colour of the hair was altered by mental emotion, and in which there appeared to have been a sudden development of air, corresponding with the white portions.

In reference to the influence of the general health upon the state of the hair, Dr. Ferber of Hamburg remembers two persons of nervous temperament, in whom the hair was soft and smooth, or harsh and rough, in correspondence with their existing state of health. Numerous cases of this kind, as well as of sudden blanching of the hair, have been recorded by British writers.

VEGETABLE PARASITES OF THE HUMAN SKIN.—The most recent views of German physicians on this subject are to be found in Dr. Heinrich Kœbner's *Klinische und experimentelle Mittheilungen*, Erlangen, 1864 ; in Dr. Phil. Gus. Pick's *Verhandlungen der K.K. geolog. botan. Gesellsch.*, Wien, vol. xv., 1865 ; and Professor Ernst Hallier of Jena's *Die pflanzlichen Parasiten des menschlichen Körpers*, Leipzig, 1866.

The classification of the diseases depending on the presence of a parasitic vegetation on the skin is not yet conclusively settled ; some authors believing that there are as many species of parasites as of names of disease ; that, for example, *tinea tonsurans*, *herpes circinatus*, *favus*, *pityriasis versicolor*, &c., has each its distinct species of parasitic mucedo. While Hebra, grounding his opinion upon his own experiments, concludes that all these diseases are produced by the same species of parasite ; and that the differences observable in it are due to stages of development, influenced by the age of the patient

and the seat of the affection. Dr. Pick, a former pupil and assistant of Hebra, transplanted different vegetable parasites from one locality to another, and found them undergo a change of character to the extent of resembling a different species, and that with this change there occurred a corresponding change in the character of the resulting disease. Thus he says :—1. When the fungus of favus, the achorion *Schœnleinii* is inoculated in the skin of the trunk of the body, vesicles like those of herpes precede the formation of the *scutulum* of favus. According to Koebner, the stadium herpeticum invariably precedes the development of favus. 2. The herpetic vesicles, in the next place, undergo a further development, so as to constitute favus, or it may be herpes tonsurans. 3. When the parasite of herpes tonsurans, the trichophyton tonsurans of Malmsten, is transplanted, it gives rise to herpes tonsurans, but occasionally produces vesicles like those of the herpes preceding favus,—herpetisches vortstadium, Koebner. 4. The fungus-elements of favus, sometimes, when the latter is luxuriant, produce organs of fructification, which are identical with those of penicillium glaucum and a species of aspergillus, both fungi of the common mould. 5. Penicillium glaucum transplanted on the skin produces an eruption identical with the herpes preceding favus. 6. The same fungus sometimes gives rise to favus or the herpes which precedes it, and sometimes to herpes tonsurans. In this manner the identity of the vegetable parasite of favus and herpes tonsurans, perhaps also of herpes circinatus and mentagra, is established by the clinical observations of Hebra as well as by those of Koebner and Pick.

Hallier, pursuing the same inquiry botanically, confirms entirely the above views ; by sprinkling the penicillium glaucum upon various substances, such as milk, fruit, glycerine, blood, &c., he was enabled to follow the progress of development of the fungus. He found that, in conformity with the nature of the soil and the degree of exposure to air, all those varieties were produced which have received different names, and have been regarded as distinct species ; and he establishes his views by the aid of admirable microscopic drawings. Penicillium glaucum gives origin to the following series of modified forms, all of which are the development of lower forms or are connected by intermediate links :—1. Penicillium glaucum, the parasite constituting common mould, is met with on all vegetable matter undergoing decomposition. 2. Achorion is developed from penicillium when the latter is sprinkled on blood, albumen, animal substance, or glycerine, and is the cause of favus, herpes circinatus, herpes tonsurans, and sometimes mentagra. 3. Oidium albicans, or oidium lactis of Fresenius, is always present in lactic acid, and in the cavities of the human body where lactic acid is present ; it is possibly identical with the leptothrix buccalis of Remak, and forms a transition to the next variety. 4. Leptothrix is developed from the sporidia of the penicillium when mixed with a diluted fermenting fluid, such as simple water or the saliva. 5. The ferment of leptothrix, the commonest of the fermenting mucedinales of saccharine solutions, is met with in association with diphtheritic phenomena in the œsophagus, stomach, &c. ; and as a consequence of the imbibition of bad beer. 6. Torula originates from penicillium by lateral budding, and is found in the human skin, and, in company with leptothrix, in the cavities of the body. 7. The ferment

of aërosporon is derived from the penicillate spores of penicillium, through the agency of oily substances ; hence the chains of trichophyton found in the substance of the hair are supposed to owe their means of nutrition to the oily matter of that structure, and to originate in the achorion of favus. Achorion sometimes throws out penicillate processes as organs of fructification, like those of penicillium ; and the mutual relations of penicillium, achorion, and aërosporon, or trichophyton, are easily traceable. Dr. Hallier's work is deserving of attentive examination and careful study.

ON SKLERIASIS OF THE SKIN IN ADULTS, OR SKLERODERMA ADULTORUM. —Professor Masler, of Greifswalde, in the 33rd number of "Virchow's Archiv," reports two cases of skleroderma in the adult. One was that of a lady aged 28, in whom the affection was preceded by an inflammatory or erysipelatous swelling of the skin of the face ; the disorder lasted for a month, and was followed by a similar condition of the arms and lower limbs. On the subsidence of the cutaneous inflammation, the integument of the face, the eyelids, the neck, the arms, and the hands, was left indurated, and as dense as wood ; the skin was dry, thickened, and closely adherent to the subjacent fasciæ and muscles ; it was brownish or yellowish in colour, and contracted to such an extent that the movements of the joints, of the fingers, and also of the eyelids and lips, were restricted. At some points the thickened and glossy skin resembled a cicatrix, and the nose and lips were altered in shape. The cutaneous sensibility was lowered, but the action of the sudoriparous glands was unaltered or excited to excess ; the muscles were weak, and their movements painful, on account of the rigidity of the skin ; but they contracted normally under the stimulus of electricity. The morbid action extended to the mucous membrane of the mouth and fauces ; this membrane was pale and contracted, and deglutition was impeded. Treatment seemed to have very little influence over the disease ; cod-liver oil and iron in large doses produced very little effect ; and at the end of five years there was but little improvement in the patient's condition.

The second case was that of a young Hungarian lady. Six years before she had suffered from typhoid fever, which left her anæmic. On her recovery she married, and has since had a child ; but her chloro-anæmic condition is unaltered. Six months after the birth of her child, skleriasis of the skin made its appearance on her right arm and right leg ; it began with redness and swelling, and was taken for erysipelas. There was some muscular twitching of the affected limbs, but the general features of the disease resembled those of the previous case. The baths of Franzensbad were of some service ; the wood-like skin became less dense, the dark-brown spots were smoother, and she moved her limbs with greater freedom.

Dr. Masler traces some similarity between these cases and elephantiasis Arabum, and finds them most frequently in anæmic females. The seeming erysipelas was remarkable in both instances, and the hemilateral distribution of the affection in the last.

The number of cases of skleroderma adultorum hitherto reported amounts to thirty-one ; twenty-four of which occurred in women, and seven in men. The authors who have written on the subject are Arming (fifteen cases), Forster, Nordt, Masler, Köhler, Köbner, Gillette, Bazin, and Erasmus Wilson ;

and the publications in which the reports may be found are the "Würzburg Med. Zeitung," 1861, vol. ii. p. 186 and p. 294; "Virchow's Archiv," vol. xxii. p. 198, vol. xxiii. p. 167; "Wurtemberger Med. Correspondenzblatt," 1862, vol. xxxii. p. 15; "Klinische und experimentelle Mittheilungen," Erlangen, 1864, p. 29; "Archive générale de Médecine," 1854; "Leçons sur les Affect. cutan. artific. et sur la Lepre," 1862; and "Erasmus Wilson on Diseases of the Skin," and "Student's Book of Cutaneous Medicine."

ON THE CELLATED STRUCTURE OF THE SMALL-POX PUSTULE, by Dr. W. Ebstein, Breslau: *Virchow's Archiv*, Dec., 1865.—The cellated structure of the small-pox pustule has been made the subject of investigation by numerous authors. Mayer and Fuchs recognized the existence of septa in every form of variolous pustule, Bateman only in those of true variola. Simon, Von Baerensprung, and Rokitansky also favoured the cellated structure, while Alibert regarded the pustule as a mere bulla. Hebra is opposed to the cellated theory, and explains the special conformation of the variolous pustule by reference to the general infiltration of the epidermic tissue and its relations to the openings of the glands of the skin and to the mouths of the hair-follicles. While Hebra's disciples Auspitz and Basch find in the small-pox pustule a trabecular structure. Ebstein explains these differences of opinion by appealing to the structure of the epidermis. "The rete mucosum," he observes, "is composed of two layers of cells,—an upper and horizontal layer which adheres to the under surface of the epidermis proper, and a deep layer which follows the outline of the papillary surface of the derma, and envelops every papilla with a sheath. Hence a different plan of construction is apparent when the vesicles are produced in the upper or in the under layer of the cells of the rete mucosum. In the former there exist spaces which have a horizontal direction, due to the horizontal position of the layers of the epidermis, and the separation of those layers by the effusion of fluid; while in the deep portion of the rete Malpighii there are spaces which are vertical, and which correspond with the sheaths of the papillæ. Each pustule embraces in its circle four or five papillæ, therefore every pustule may possess a similar number of vertical spaces, and above or more superficial than these, two or three horizontal spaces. In the early period of the pustule the spaces or chambers, filled with pus-cells, are separated from one another by partitions composed of the cells of the rete mucosum, and not by partitions of new formation,—the so-called false membrane; but as the pustule reaches maturity, the septa, and at the same time the papillæ themselves, are destroyed. Ebstein fails to inform us how the umbilication of the small-pox pustule is produced, or of the nature of the relations subsisting between the pustule and the hair-follicles.

CUTANEOUS MANIFESTATIONS IN THE INSANE.—DR. BEGLEY of the Hanwell Asylum, in the course of a correspondence which we had with him on the above topic, observes:—"The insane are not more prone to affections of the skin than other people; insanity is unquestionably a disease of debility requiring good diet, nutritive food, and supporting treatment; these being duly supplied, and sanitary measures adopted, I believe skin diseases will not be more prevalent in asylums than elsewhere. It always was the practice here to give a warm bath once a week to each patient, but the mode of

administering this was formerly highly objectionable. Three patients, occasionally four, were put *together* into one bath, and when they were well washed with soap and water, they were taken out ; three others put in ; so a third, and in like manner a fourth batch ; the water, or rather suds, being changed only once for twelve or sixteen patients. This evil could not be remedied, owing to the deficiency of water ; but at length an artesian well was sunk at great expense ; since which there has been an abundance of water. New baths were put up ; boilers, &c., and steam-engine ; now each patient has a *clean* warm bath once a week, others requiring cleansing more frequently, some even daily ; and in no case now is the water used a second time. The shirts, stockings, and flannels of the patients are changed twice a week, and the sheets once a fortnight. Formerly the patients had gruel for breakfast and supper ; this has been abolished ; cocoa and tea substituted. They had soup for dinner three days a week ; now they have solid substantial meat for dinner on five days, a meat pie on one of the other days, and Irish stew on the remaining day ; wine to the sick and feeble, as well as porter ; wholesome home-brewed ale to the general body. Before these changes took place, skin diseases were frequent ; now they are rare indeed. Frequently patients on admission from workhouses are found to be thin, pale, and feeble, many of them having also extensive cutaneous eruptions on the trunk and limbs ; these generally disappear as the general health improves under the dietetic treatment and sanitary system pursued here, without recourse to medicinal agents, which, however, are sometimes needed and resorted to. Much has been done at Hanwell to ameliorate the condition of the inmates, and we are now as well, and perhaps better off in the system of bathing than any asylum in the United Kingdom."

LEPROSY ; ELEPHANTIASIS GRÆCORUM ; LEPROA ARABUM.—Under the title of true elephantiasis, or leproa Arabum, Mr. Lawrence—now Sir William Lawrence—describes in the sixth volume of the "Medico-Chirurgical Transactions," the case of a boy of 14, who was received into St. Bartholomew's Hospital on the 1st of April, 1814, and discharged in an improved state in February, 1815. The lad was one of three children born of English parents, and the only one attacked with this disease. When a child, he was sent to New Providence, one of the Bahamas, where leprosy prevails. He worked hard in the open air, was much exposed to the weather, especially to extreme heat of the sun, and was fed on the coarse food supplied to the negroes.

In the autumn of 1814 he left New Providence for England ; he was then in excellent health, but he was wet through on his voyage, and took a severe cold. He was languid and drowsy, but without loss of appetite, and his head and face were somewhat swollen, and on the subsidence of the swelling some tubercles made their appearance on his ears and face.

The tubercles arose without pain ; they were at first flattened, about the size of a split pea, and in some parts increased to a considerable bulk. Their colour and consistence was like that of the skin at first ; they afterwards became red, then dark and somewhat livid. Some cracked and ulcerated, and discharged matter which concreted into thick crusts ; but the ulcers were always superficial and soon healed.

On admission into hospital, the whole face, and especially the ears, fore-

head, eyebrows, and eyelids, was occupied with the disease, but the scalp was free. The largest tubercles were those of the ears, and produced considerable deformity. The nose was flat, and expanded laterally ; the eyebrows had fallen out, but the eyelashes remained, although the eyelids were thickened and tuberculated. There was no affection of the nostrils, but the voice was rough and hoarse, and there were tubercles on the palate and velum. The fingers, hands, and wrists were covered with numerous tubercles, which extended up the forearms ; and there was a small crop on the prominent part of the shoulders. The feet and toes were swollen, the soles were red and tubercular ; there were tubercles on the dorsum of the foot and ankle, and a few upon the thighs. During the early part of his residence in the hospital, the disease advanced, more tubercles were produced, and numerous ulcers, some of the latter having the appearance of being cut out with a gouge. Otherwise his health was good, he had an excellent appetite, his tongue was clean, and he slept well.

It was noticed that the organs of generation were incompletely developed, the scrotum was shrivelled, and the testes soft, and no larger than horse-beans. He had a smart attack of herpes zoster while in the hospital, and also an attack of measles, which he caught from one of the patients.

Sir William Lawrence remarks with regard to treatment, that all medicines seemed inefficacious ; he had administered mercury, antimony, and arsenic, and the latter did harm rather than good. The only remedies that appeared to be of service were the mineral acids and tonics, and above all a full diet of meat, porter, and wine.

When he first entered the hospital, the disease advanced, then it was stationary, and towards the end of December 1814, it began to decline, the tubercles subsided, and the ulcers healed. He was discharged at the end of ten months, when no trace of tubercles remained, and little vestige of the disease beyond the cicatrices and deformity which it left behind. Nevertheless, there still existed some œdema of the feet and legs, with some redness ; and thickenings could be felt in various parts on pinching up the skin.

With the great improvement in the skin, a cough was developed, with shortness of breathing, and he was sent into Devonshire. Three months later his cough was better ; he had acquired strength, but there was a return of ulceration in his face. And later still, the last report that is given of him is that the ulceration continued. At about the same time his elder brother died of phthisis.

Reviewing the pathognomonic features of this case, we note—1. The exposure of the boy to a climate to which the disease is endemic. 2. The non-appearance of the disease until after he had quitted the malarious climate. 3. The accidental excitation of the disease by a febrile attack following a wetting through. 4. The special leprous symptoms, lassitude and drowsiness. 5. The gradual development of the tubercles ; first on the face, then on the hands and feet. 6. The loss of the eyebrows. 7. The affection of the palate and velum. 8. The roughness and hoarseness of voice. 9. The progress of the disease in defiance of remedies. 10. The production of ulcers which broke out and healed without rule. 11. The suspension of progress of the disease. 12. Its decline, and subsidence of the attack ; and 13. Its reappearance after

several months. Sir William Lawrence does not notice any insensibility or muscular atrophy, or any pigmentary changes in the skin.

Dr. Southey's Case.—In the same paper is another case of the same disease, reported by Dr. Southey. The patient in this instance was a young lady, aged 22, born in Bombay; her father having been an English officer and her mother a Hindoo. The disease was first noticed at the age of ten, and has consequently been twelve years in existence. This will explain, in some degree, the difference between it and Mr. Lawrence's patient. And it may also be mentioned that there frequently exists a difference of energy of the disease in the East as compared with the West.

At ten years of age, the patient became the subject of red blotches, developed on different parts of the body, which disappeared and recurred at intervals for several years. At seventeen the blotches assumed the character of tubercles, which rose on the elbows and feet; the skin in the first place became thickened, then the tubercles were produced; they appeared and increased in size, without pain; were red at first, then livid, and then ulcerated, and poured forth a discharge. When seen by Dr. Southey, the whole body, with the exception of the trunk, was covered with dry black crusts, ulcers, or tubercles. The face was horribly disfigured; the eyebrows were gone, and their place occupied by a band of scurf; the eyelids were livid, tuberculated, and almost deprived of lashes; the nose was flat, with thickened alæ; the face was covered with tubercles, black crusts, and ulcers; and the ears were thickened, enlarged, and altered in shape.

The conjunctiva was studded with small tubercles, and there was a beginning of opacity of the cornea; the lips and tongue also presented a number of small tubercles; there was ulceration of the tonsils, part of the uvula was gone, and the voice was hoarse. The habit of the ulcers is to heal and break out afresh; in some places they stripped the integument from off the muscles, and their edges were raised, callous, and jagged.

The pulse was quick, 100 to 120, her appetite weak, and digestive organs torpid, rendering necessary the frequent use of purgatives; menstruation was regular, but the mammæ had disappeared.

In the treatment of this case, recourse was had to acids, alkalies, vegetable and mineral tonics, arsenic, dulcamara, and sarsaparilla, but nothing seemed to avail; some temporary advantage it was thought was obtained from a combination of antimonial powder and blue pill.

ON THE TREATMENT OF SYPHILITIC ERUPTION WITHOUT MERCURY.—The days are not very long passed away when, in the prevailing ignorance of the various manifestations of constitutional syphilis, cases of this disease were submitted to the ordinary expectant treatment, without a suspicion, or with nothing more than a suspicion, of their true nature being entertained. Of this kind are some cases of "a tubercular eruption of a syphilitic appearance, but treated without mercury," narrated in a paper read before the Medico-Chirurgical Society in November, 1813, by Dr. Bateman. The points of interest of these cases, are firstly, the picture which is drawn of the usual course and duration of the disease, uninfluenced by mercury; and, secondly, the treatment which was adopted, and which proved successful, although employed in ignorance of the real disease.

We cannot suppose that any of our readers could doubt the syphilitic nature of the disease on perusing the following history of its phenomena. "Within the last two years," says Bateman, "I have had occasion to see eight or ten cases of an eruptive disease, which does not appear to have been noticed by medical writers, and was not included in the enumeration of Dr. Willan." It begins with severe headache and pains in the limbs, resembling rheumatism; great languor and debility, loss of appetite, tongue furred and clammy, pulse quick and feeble, constipated bowels, and a state of erythsm of the whole system, with roughness and soreness of throat, and slight tickling cough.

After two or three weeks of these symptoms, an eruption appears in the region of the epigastrium, resembling flea-bites, and in one instance taken for measles, and spreads over the trunk and limbs, and at length reaches the head and face. It begins as small circular spots, from one to two lines in diameter, slightly elevated, flat on the summit, smooth and shining, of a dusky rose-colour at first, afterwards darker and chocolate-coloured or purple, desquamating in the centre, and larger and more scaly on the legs than elsewhere. They have no tendency to ulcerate, and are free from itching, and when they subside and disappear, leave behind them brown stains which gradually fade away.

The soft palate and tonsils are puffy and inflamed, and the latter the seat of superficial ulceration. The edges of the eyelids are also inflamed, and sometimes swollen with the eruption, and the conjunctiva is somewhat congested.

"Of the cause of this eruption," says Bateman, "I can say nothing. I have seen it in two men and seven or eight women." One woman seemed to take the disease by contagion from her husband. He had been ill with it for two months, and when it disappeared, it attacked the wife, and continued with her for the same space of time. One patient was a servant maid, aged 25, who was obliged to leave her place in consequence of the debility induced by the disease; and she remained ill for three months. In one case there occurred "that peculiar inflammation of the iris which has been considered by high authority to be exclusively of syphilitic origin, and in that instance the eruption was readily cured by a mercurial course." But in the cases before us, Bateman could discover no primary syphilis, and therefore could not believe that the syphilitic poison could have any share in the production of the disease. "The pains in the limbs, but more especially the inflammation and ulceration of the tonsils, and the tarsal disease, super-added to such an eruption, convey the strongest suspicion of its syphilitic character." But then he goes on to explain that these same symptoms are present in other diseases. There was none of the pustular and ulcerative tendency, he argues, so invariable in syphilis, and then comes the crowning fact that recovery took place without mercury. One patient died from neglect of nourishment and medicine; and the ordinary duration of the disease under treatment was one or two months.

The treatment pursued by Bateman, and which he found to be both satisfactory and successful, consisted in the use of tonics and occasional purgatives; bark and the mineral acids afforded relief, and "under the use of the decoc-

tion of sarsaparilla, the amendment was uniform, though slow, and the cure ultimately complete." Bateman's paper is accompanied with a plate which places the diagnosis of syphilitic tubercular eruption beyond the reach of question.

NEW REMEDIES FOR CUTANEOUS DISEASES.—In a paper published in the *British Medical Journal* for March 23rd, 1867, Mr. Startin recommends the use of bandages and felt splints stiffened with paraffo-stearine, in the treatment of varicose veins, diseased joints, and "all maladies wherein rest, equable support, and solidity of the parts affected, are required." Paraffo-stearine, or rock-paraffin, may be procured at any moment by the purchase of a pound or two of the stearine candles made for consumption in India. The stearine candles melt at a temperature of 157 deg. ; the rock paraffin candles at 135 deg. ; while the most convenient degree of solidity, namely a melting-point of 160 deg., is obtained by a mixture of the two. The bandages, whether of Domett flannel, Welsh flannel, gauze, woven, elastic, or otherwise, or the felt, are saturated with the melted material, and may either be applied at once, or kept in readiness for use. In the latter case they simply require to be heated by the aid of hot water. When the bandages are applied, they may be strengthened by a varnish of paraffo-stearine, laid on with a brush ; they are solidified by a wrapper of linen soaked in cold water, and if openings are required for the adaptation of dressings or the drainage of morbid secretions, the bandage or splint "may be readily cut by means of scissors, curved on their cutting edge into the segment of a circle, or bent to an obtuse angle."

In removing the application or bandage, the paraffo-stearine may be softened and dissolved by being brushed over with benzine. Benzine "will be found a most useful surgical accessory, not only to clean the skin and hair from all their natural or acquired oily or sebaceous secretions, but also to remove grease, plasters, &c., from the cutaneous surface without causing local irritation." Benzine is one of the hydrocarbons, and as such was termed *benzole* by Liebig ; another name for it is mineral or coal naphtha. It is one of the products of the distillation of coal, possesses a powerful odour of gas, is more volatile than ether, and highly inflammable ; so that when used in proximity with flame, it demands extraordinary care. It has been recommended by a French physician for the treatment of scabies ; and by the late Alexander Ure was applied to the inflamed surface in gout.

Mr. Startin has no doubt that for the purposes above mentioned, benzole "will come into general requisition, perhaps even as extensively as glycerine, which I introduced twenty-four years ago, and which I have lived to find the subject of memoirs and special treatises advocating its employment for the purposes for which I originally recommended it." We can corroborate Mr. Startin's claim to the introduction to the profession of glycerine. We remember at about the time mentioned by him we paid a visit to our old friend Warrington at Apothecaries' Hall. He pointed out several carboys filled with glycerine, and mentioned its peculiar properties of sweetness without containing saccharine matter, and its easy miscibility with water, and its resistance of evaporation ; and we ordered a few pints for experiment, some of which we have by us still, and it was charged to us eighteen pence the pint. He remarked that it was a

product of the manufacture of the emplastrum plumbi ; that it was regarded as useless, and allowed to run away into the sewer ; but that, struck by its appearance and qualities, he had filled a few empty carboys with it, thinking that some day it might possibly find an use. Shortly afterwards he met Mr. Startin at a *soirée*, and suggested the probability of this remarkable substance proving of service as an application for cutaneous diseases. Mr. Startin improved the opportunity, which has put medical practitioners in possession of a valuable and in its way a perfect and an incomparable remedy.

DERMATOLOGICAL MUSEUM.—The *Lancet* informs us that a museum illustrative of cutaneous diseases is about to be formed in the Hospital St. Louis, in Paris ; a nucleus being supplied by a donation of the drawings and preparations of Devergie, lately one of the physicians of the hospital, and the author of an excellent treatise on diseases of the skin.

CUTANEOUS ANÆSTHESIA.—Dr. Richardson concluded his course of lectures on experimental physiology for the session 1866-7, on Tuesday, June 4th. He explained that the operation of the ether spray in procuring insensibility, consisted in the freezing of the water which entered for so large a share into the composition of nerve-substance ; that under ordinary circumstances the use of the spray induced a transient hyperæmia of the skin, a state which he termed *pre-action*, while the hyperæmia which followed the state of insensibility or *inertia* of the nervous element of the skin, constituted *reaction*. He further showed that by the use of a more volatile hydrocarbon, such as the amylic ethers, he could freeze the skin instantly as by a shock of cold, without inducing the preliminary preaction. By means of this shock of cold, he caused suspension of life in a frog, and remarked that under a continuance of the cold, the frog might remain in a passive state for any number of years, while gradual elevation of temperature would restore the animal to life. A frog frozen in this manner until it became as rigid as stone, at the early part of the lecture, recovered its ordinary activity before the lecture was concluded. When he froze a portion of the trunk of a nerve, the power of conveyance of physiological impressions ceased, but the frozen nerve gave transit to the stimulus of electricity. The conversion of the water of the nerve-substance into the solid form of ice, amounts virtually to an abstraction of the water ; hence the result is in every way similar to the removal of the water by heat or by alcohol. The lecturer illustrated these observations by experiment, and expressed his belief that the toxic effects of alcohol very probably resulted from a similar process. He was listened to with great attention by a somewhat numerous audience, among whom were several distinguished foreign physiologists, and was warmly applauded at the close of his lecture.

DERMIC CYST OF THE OVARY.—Dr. John Harley lately exhibited at the Medico-Chirurgical Society a small ovarian cyst, taken from a woman aged 35, the mother of five children ; the tumour weighed twelve ounces, and was attached to the right ovary ; its contents being a quantity of solid yellowish fat, enclosing hair. The scalp tissue from which the fat and hair were derived, formed a rounded projection from the wall of the cyst near its point of attachment to the ovary. A second prominence of smaller size near to

the former contained a bicuspid tooth enclosed in a sac ; and on the further side of the cyst was a lamina of bone supporting another well-formed bicuspid tooth. The fatty matter was probably identical in origin and composition with the fatty secretion so abundantly present on the skin of the foetus at birth, the *vernix caseosa*. The occurrence of *hair in abnormal situations* is further illustrated by Toynbee and Hinton, as reported in the Pathological Transactions for 1866. Toynbee found hairs in the mastoid cells, surrounded by masses of epidermis, the product of the lining membrane of those cells. Hinton observed incompletely-developed hairs embedded in the thickened lining membrane of the tympanum in the neighbourhood of the mastoid cells ; and also two small sebaceous tumours close to the head of the malleus in a boy, twelve years of age, who had suffered from a chronic discharge from the ears. The contents of the tumours were laminated epithelial cells, like cutaneous tumours of a similar kind.

ON THE MANAGEMENT OF INFANTS.—Great things have often small beginnings, and it is hardly possible to glance over the various chapters on health and disease, as they are presented to us in our daily experience, without a thought of the power too often wasted in the first stage of life—its infancy. Yet much has been written, much more said, on the subject of “woman’s mission.” She has contended for her rights, and boasted of her privileges, forgetting that she can have no higher right, no greater privilege, than the one she possesses as a mother,—that of nourishing, guiding, and supporting the tiny life which must owe chiefly to her care what alone can render that life a blessing !

In this, no hireling nurse, however experienced, can supply her place ; and it is no slight discredit to Englishwomen that the shuffling of their own proper burden on to shoulders paid to bear it, should be so generally practised. We often see the mother, who is intensely anxious as to the health and teaching, manners and dressing of her growing-up children, hug herself with the notion that the baby can shift for itself, and that clothes, no matter how fashioned ; food, no matter how prepared ; and nursing, which perhaps consists of shaking and bumping and rocking alternately, are things of course, and require no looking into so long as the infant apparently thrives, or the evidence of its discomfort is confined to the nursery.

Now the exercise of mind is as necessary in the nursery as in the school-room. Nurses are not expected to be thinkers ; they undertake the duties of their post much as a cook does the management of her joints and puddings, and their experience, as a rule, is quite as much a matter of routine. But the mother should think as well as feel for her offspring, and her watchful influence be acknowledged in those hours when other claims upon her time force her to depend upon those who take her place.

It is a very common excuse with young mothers, whose education has embraced but little of practical life, that they know nothing of their maternal duties, and are not therefore able to perform them properly ; but surely this is no just apology. Every mother should learn her duty : let her go hand in hand with nature and common sense, and she will soon acquire all the knowledge her instincts leave untaught ; so far at least as to enable her, under fair circumstances, to rear her child in health, and certainly to carry

out with more intelligence the hints derived from science, when sickness or disease display themselves.

The woman who undertakes the pleasures of maternity must not shrink from its responsibilities ; she will scarcely find a fairer field for the exercise of her heart and mind, than in the Baby Kingdom, where she ought to reign supreme ; and yet where the seeds of disease are too often sown in very ignorance, and life itself not unfrequently sacrificed by neglect.

But now, having said so much on the subject of the mother's duty, let us try to give a little practical help to those who are really in ignorance of the routine of nursery life ; always with the understanding that rules are merely the outlines of a picture, which must be filled up with the lights and shades of intelligence ; for the rule which may answer perfectly with five children, may be of no use to the sixth ; and that while light and air and food and clothing are absolutely necessary to the rearing of children, there is not one of these that does not demand thoughtful and judicious use. We will not venture to meddle with that sacred time, "the month," when the infant is in hands that will brook no interference save that of the doctor ; and when even his advice is matter to be well weighed before it is followed with the faith which is the result of experience.

We will take the life of the baby when left alone with its mother and the regular nurse, and divide its little day into so many portions, passed as they must be in washing, dressing, feeding, exercise, and sleeping.

The best bath for an infant is a wooden one of an oval shape : the child is not so likely to slip about in it as in an earthenware vessel, or to hurt itself if it does so. Previously to taking off the infant's night-gear (for let us not omit to say, the morning is the best time for the bath, which should be given once a day), the nurse should equip herself in a substantial flannel apron, and then having arranged all her toilet requisites, and the bath itself, which must on ordinary occasions be simply tepid, she should undress the child, and with her hands soap it well from head to foot, taking care to leave the face till last. Then, having well soaped each little crease, and penetrated into each far corner, the little form should be gradually immersed in the bath, where it will kick and plunge like a young hippopotamus, being supported all the time by the nurse's arm, passed under the body, while her hand lays firm and gentle hold of the child's left arm. The rinsing over, it should be placed on the lap in a large soft towel, and gently dried. It should then be well shampooed with the hand, until every part of the body is smooth and dry. If this be carefully done, there will be no occasion for the use of violet powder, and any slight redness, or excoriation, which exists, will be soothed by the application of a little zinc or marshmallow ointment. The shampooing is beneficial in more than one way : it gives exercise to the muscles, and produces healthy action in the skin. Moreover, if properly done, it leaves no doubt of the child being thoroughly dried before its clothes are put on. And here we cannot help adding that the mother's hands are the best for this work, and she who cannot spare from her daily pleasures or daily duties one little half-hour for the exercise of such a task, misses an extra pleasure and neglects an extra duty. The plunge into the strange element will lose half its terror when the mother's face is smiling over the

bath. Her soft hands, free from the stains of labour, will do their work far more pleasantly than those of the nurse, and the sympathy which exists between the mother and child will suggest more to her for the babe's comfort than any teaching could point out.

We wish the subject of infant dressing were as easy to discuss as the one just dismissed. Surely nothing can be more uncomfortable or less convenient than that adopted in the present day. To watch the turning and tying, the stitching and arranging necessary to complete the attire of a well-dressed baby—remembering that baby has just gone through the exertion of the bath—is enough to make one understand its peevish fretting before the business is half accomplished. It would be a great boon to babies if a revolution were effected in this. Dress would be quite as pretty and becoming for all babies, with half the fuss with which they are now inconvenienced.

Who can say that it is not almost cruel to bare the little arms and throat in the cold winter weather? to bandage its body without regard to the space an extra meal may require? to stab it with pointed work, and worry its arms with starched frills, and weigh its feeble limbs with long trailing skirts? Think of the baby carried in nurse's arms on a July morning, its head buried in a deep hood fussy with lace and white satin, and its wee proportions lost in the folds of a cumbrous cloak, with its flapping accompaniment of cape.

All this surely is wrong, as a matter of health and comfort. An infant's dress should be as simple as possible, and adapted to the season. It should be so fashioned that it may be easily put on and taken off. Its arms and neck should be covered, and its feet well clothed. Warmth to the feet at all times is most essential, and this may be easily attained by letting the baby wear woollen socks, which may be kept on the feet by a band of broad cotton elastic, care being always taken to prevent this pressing on the child's ankle, and thereby stopping the circulation of the blood.

A healthy mother, with a good supply of milk, has little else to do in order to nourish the baby well, than to be careful of her own diet—and to keep her temper. This last is a dreadful hint; but it is quite certain that a fretful mother makes a fractious child, and that the nursing mother who allows little or great things to put her out, or in other words, to excite her feelings and fever her blood, is sure to do her baby harm. When the mother has not sufficient milk to feed her child, it is easy to eke out what she has with help from the cow. There is a foolish prejudice existing, that the mother's milk and the cow's do not agree when taken together; but how can this be? Good food, given properly, must always do its work if the digestive organs are healthy. Bringing up "by hand" is always a difficult matter, involving great watching and care, simply because it is not natural: at the same time many healthy children are reared in this manner. We know a lady who brought up six children almost entirely by hand; and, as the last of these was the most successful specimen of her care, it may be useful to subjoin the young gentleman's daily bill of fare from the age of six weeks.

One of Maw's feeding-bottles three parts filled with new milk—that is to say, milk with the cream undisturbed—and filled up with boiling water; to

which was added a teaspoonful of the sugar of milk, which may be had in perfection at any good druggist's. Half of this quantity (sometimes more) was given at first every two hours ; and as the child grew older, the quantity of water was lessened, the milk increased, and the time between each meal lengthened, the food being simply warmed in a pipkin. This was varied by a daily meal of arrowroot gruel ; and when the child was four months old, a meal of beef-tea. This diet succeeded well until the babe was nine or ten months old, when he was promoted to a basin of bread and milk, mutton broth, beef-tea, rice and "hasty" pudding,—which, by the bye, when well made, is a great favourite with children, and very wholesome,—an occasional boiled egg, with bread and butter, and so on ; until at the age of fourteen months he could manage a good plateful of finely-minced meat and potatoes for his dinner, a breakfast of bread and milk, or gruel, a luncheon of good broth, and a "tea" of new milk and bread and butter, or anything else that was set before the more advanced members of the little family. The child thus fed is at the present time a rosy, fine-skinned, bright little lad of three and a half years ; having cut his teeth well, and gone through both chicken-pox and measles with little suffering to himself or anxiety to his nurse.

But I must not omit to add to this that his mother carefully watched the effect of this bringing up : that there were times when her good sense told her the routine must be broken through : times when teething brought its attendant fever, and the milk had to be given more seldom, the gruel oftener ;—seasons when the state of the child's secretions indicated the necessity for administering gentle doses of castor oil, and even calomel, but *always with the doctor's sanction and advice* : for, let ladies be never so experienced in the general management of their offspring, it is always wise to let the medicine-chest alone, without very good authority for bringing it into use. Regularity is essential to good feeding : a child constantly plied with nourishment has its digestive organs too hard worked. Lazy nurses will often give a fractious child the bottle to still its crying. It is a bad plan, and ought never to be allowed. Babies are often early wakers, and there can be no harm in the matutinal slice of bread and butter, with which the child is made happy, sitting up in its little cot and watching nurse's movements with round, bright eyes ; but the habit of feeding children at irregular times should never be encouraged.

To sum up, we will say, all infants, to be properly nourished, should have good food, plenty of it, and regularly given. There is one other point which, trifling as it may seem, greatly influences a child's digestion. *Let it always feed quietly.* We have seen nurses take a hungry child, lay it flat on their lap, stuff the bottle in its mouth, and jog or rock it the whole of the meal ; which, of course, under such circumstances, it can only imbibe by gulps.

The body should be held in much the same position as it would take naturally at the mother's breast, and should be allowed to enjoy its food in peace. The same rule applies to sleeping. A healthy, well-trained baby will, if we may use the expression, go to sleep wide awake. Sleep being a natural want, needs no enforcement ; and the rocking, patting, and singing so often used to "hush" the baby, only bewilders and fatigues it. Bring up the little one in good habits, and it will expect its sleep, and

embrace its enjoyment as naturally as it does its food. Always endeavour to let the child sleep in quiet, and, if possible, without light.

It is a mistake to fancy, that because the infant's repose is not, apparently, disturbed by the noise or bustle which may surround it, it is really as healthy and sound a sleep as that enjoyed in perfect tranquillity.

A few words on the subject of nurses. Whether the mother has one or ten children, let her position be what it may, we can but repeat that nurses must be her agents, subject to her influence, and attached to her by kindness. A young, healthy woman, with her heart in her work, is worth all the experience of the most "respectable" professed nurse. Some mothers are not able to bear the fatigue of the child at night ; the baby cries in its little cot ; it is cold, perhaps, and damp, and oppressed with baby-misery. Let it seek shelter in the arms of a fresh, cleanly girl, in preference to the flannel and possible drugs of the experienced middle-aged hireling who understands these things so well that she can maintain her own theory about babies, and her comfortable rest at night, without troubling mamma on the subject. The countenance of a nurse has its undoubted effect on the baby. It should always be cheerful and bright, the index of a happy nature. A lady who, trusting in a "highly recommended" nurse, had the misfortune to find the trust broken and the child neglected, from that time made a point of having in her nursery a young person, whose education not fitting her for the post of governess, had the courage to become a nurse. She, with her gentle disposition, trustworthy nature, and refined mind, became the lady's *friend*, and the result was a very happy one for all. The mother had an agent in whose truth she could rely ; the children were never in contact, unwatched, with the ignorance of servants ; and the young lady herself forgot her homelessness and poverty in her useful life and gentle surroundings. If we look around at the numbers of poor, half-educated young women who go out as governesses, and who have neither the position of gentlewomen nor the independent liberty of servants, the thought will suggest itself that this lady's plan might not be a failure if more generally adopted. And in conclusion, there is little to be said on the subject of exercise. A stout healthy child will bear double the amount of a delicate one, but it should in neither case be taken to fatigue. It is a good plan, when the babe comes in from its walk, to disencumber it of its outer clothing, free its legs, and lay it on the bed to kick. This will be a relief from the pressure of the nurse's arms, in which it has probably been enclosed for an hour or more. Perambulators should *never* be used to convey a child under two years old. A baby had better imbibe no other air than what it can get through an open window than be exposed to the dangers of a perambulator. It is dreadful to see, as we often do, infants with their heads hanging down, their helpless bodies strapped in cruel bondage, and their tender frames exposed to the jolting of an uneven street, while the nurse goes heedlessly on or stops to gossip with a friend. It is not prudent to take children farther from their home than they can manage to walk, or the nurse can carry them, and in cold weather especially it is not safe. If a parent will bear in mind that pure air and moderate exercise are good for her child, she must use her discretion as to what is moderate, and her wits how to get the purest air. What is an easy matter to those surrounded by spacious parks and country

lanes, is difficult for the inhabitants of cities ; and so, in this particular, as in all others where the rearing of children is concerned, the mother must try to find out what is best for her darling, and make the best use of her discovery.

DRACUNCULUS.—In Mr. Balfour's annual report of the European and native troops at Secunderabad (in the *Madras Quarterly Journal* for October, 1866) we have some interesting information relative to guinea-worm disease, as follows :—"This extraordinary disease attacked the regiment [108th] in the month of August, in the most unaccountable manner, raising the ordinary per-centage of sick from five and a half to nine, and causing no less than 115 men to pass through the hospital from that time to the end of the year. The most probable origin no doubt was the bathing-water ; but I am not at all satisfied that it originated there, as many men who suffered from it positively stated that they never bathed ; besides, amongst the women and children there was not a single case. It broke out last year in a similar way amongst the 18th Royal Irish, who were located in the next barracks, and I had an idea that it was communicated from one regiment to the other, as the sick of the 108th were removed into the part of the hospital previously occupied by the 18th Royal Irish ; but many men who had not been in the hospital were attacked. However, up to about five months before the disease showed itself, the men had used a small dirty tank about a mile away from the barracks. Still, many had the disease without bathing. The men ascribed it to the drinking-water ; but here, in this case, some men attacked had never drunk this water." Mr. Balfour thinks the worm exists in the soil as well as water, and could not detect the *Filaria* by the microscope after removal of the *dracunculus* itself. One man was seventy-nine days in hospital with the disease in his forearm. A second had seven extracted. The lower extremities were attacked, save in two cases, where the seat of the disease was the arms, one the scrotum, and three or four the groin. Not a single one of the draft that arrived the year previously was attacked till they partook of the suspected water. The first case was admitted into hospital August 15, 1865 ; the last, December 31st, 1865 ; in all, 115 cases. Mr. Balfour thinks that it takes a year at least for the worm to develop and discover itself by tangible symptoms.

THE SKIN IN DIABETES.—RELATION OF DIABETES AND CARBUNCLE.—Dr. Abel Jordão has been making some profound researches into the disease diabetes, in his observations, entitled "*Estudos sobre a Diabete,*" *Pelo Socio Correspondante*, "*Memorias da Academia Real des Sciencias de Lisboa,*" pp. 20, Lisbon, 1865.

He describes the skin as pallid generally, often natural, perhaps icteric ; in two cases he has seen it bronzed ; it is dry, but not constantly so, often natural about the belly and chest, but very dry about the extremities. There is an abated vitality, the hairs fall out. Various eruptions may be present—lichen, psoriasis, herpes, impetigo, furunculus, and anthrax. He thinks there is a direct association of anthrax and diabetes. Dr. Anguino da Fonseca, of Pernambuco, has noticed that anthrax is very frequent in that city, and its aspect is of such a peculiar character that it is generally regarded as diagnostic of diabetes. One carbuncle usually comes first ; then a second : in one instance there were twenty-two. The back is a favourite seat. The carbuncles of dia-

betes have smaller apices than ordinary anthraces, the edges are everted, and there is an internal cavity like a cyst ; the pus contains sugar, it is freely produced, is of chocolate colour, and has the odour of honey.

Gangrene is also common, according to the same authority, in diabetes. It is preceded by a rose-coloured pit, beneath which a depression in the derma is to be felt. The sweat in diabetes contains sugar. The urinary and genital organs are often erythematous and often pruriginous. It seems that in diabetes, when the anthrax is developed, the sugar diminishes or disappears from the urine.

THE DIABETIC HABIT IN RELATION TO GANGRENE.—M. Verneuil brought before the Société Impériale de Chirurgie, in December last, the question of the influence of diabetic habit upon operative interference. He sought to ascertain the opinion of the members as to the propriety of operating when diabetes existed, his own experience leading him to conclude that the fatality after such operations was very great, and a suggestion was thrown out as to the possible rise of senile gangrene from some diabetic taint.

Books Received.

ON ADDISON'S DISEASE : Clinical Lectures on Addison's Disease, and a report on diseases of the supra-renal capsules. By Edward Headlam Greenhow, M.D. Roche, 1866, 8vo., pp. 128.

BLAUE HAARE. Von Dr. Hermann Beigel, London. Separat Abdruck aus Virchow's Archiv.

DU TRAITEMENT DES MALADIES DE LA PEAU par les Eaux sulfureuses de Baréges. Par Dr. M. E. Le Bret. Paris, 1867, pp. 32.

GIORNALE ITALIANO delle Malattie Veneree e delle Malattie della Pelle. Compilato e diretto dal Dott. G. B. Soresina. Milano. Vols. i. ii., 1866. Fas. 1—5, 1867.

THE AMERICAN JOURNAL of the Medical Sciences. Edited by Isaac Hays, M.D. Philadelphia : Henry C. Lea. No. 106. April, 1867.

THE MEDICAL RECORD. New York. No. 28, for April, 1867.

REPORT ON LEPROSY. By the Royal College of Physicians. Prepared for Her Majesty's Secretary of State for the Colonies. With an Appendix. 1867.

GERMINAL MATTER and the contact theory. By James Morris, M.D. London : Churchill. 1867, pp. 23.

Correspondents.

CONTRIBUTORS are requested to send in their papers as early in the quarter as possible ; all communications, both from *Contributors* and *Correspondents*, to be addressed to the Editor, 17, Henrietta Street, Cavendish Square.

LECTURES ON CUTANEOUS MEDICINE AND DISEASES OF THE SKIN,

BY ERASMUS WILSON, F.R.S.



LECTURE III.

On the Pathology of the Skin.

GENTLEMEN,

THE pathological lesions of the skin are the alphabet of dermatopathology, out of which we construct words which represent its different diseases. Like the characters of the alphabet of language, they are simple and definite, and may be acquired with the most moderate attention. Nevertheless, though simple, a perfect knowledge of them is essential and important; and we can hope to make as little progress in dermatology without a familiarity with them, as we could in the study of language without an acquaintance with its letters. We have already examined the A, B, and C of dermatopathology, and we proceed, in the next place, to the study of D. A is represented by *redness*; B, by *pimple*; and C by *vesicle*; each, as we have seen, offering to our observation a greater or less variety of type. The fourth on our list of primary pathological lesions is *pustule*; and we have now to inquire upon what features its special peculiarities are founded.

The PUSTULA is a prominence of the epidermis, containing *pus*; in other words, it is a *vesicle containing pus*. From the nature of its contents it is yellow, or yellowish; it is round, generally hemispheroidal, and ranges in size from one to several lines in diameter; its average breadth being two or three lines. The presence of *pus* in or on the skin indicates the existence of a new pathological process, one of a graver kind than that which gives rise to a papule or a vesicle, of a higher form of morbid activity, and therefore one which we must regard, if possible, more seriously than the preceding lesions. In hyperæmia there may be present a diffused exudation, giving rise to general swelling; in papula the

exudation is limited and concentrated and more intense; in vesicula, the exudation is the watery part of the blood, very little, if at all, altered in its nature, poured out in the rete mucosum; whereas in pustule a new product is developed, the pus-globule, by a formative operation, namely by the proliferation of the cell-substance of the cutaneous tissues.

Two things, therefore, must be present to our remembrance in *pustule*, namely, a more or less yellow colour; and the dependence of that colour on a new formation, the pus-globule, which consumes and destroys the normal structure of the tissues in which it is produced. The colour may range from the lightest primrose to the deepest yellow, with every degree of intervening tint; and the pustule itself may be superficial and minute; or, on the other hand, it may be deep and of considerable size, suggesting the comparison with a small abscess. The characteristic primary lesion of eczema, as you well know, is a minute vesicle; but eczema sometimes assumes a pustular form, and is then denominated impetigo. If you observe the pustules of impetigo in the course of their development, you will find them to be, in the first instance, vesicles containing a transparent fluid; and this transparent fluid passes more or less quickly into the state of pus. A similar change takes place in the pustule of variola; the primary lesion of variola begins as a stigma; then becomes a papule; thirdly, a vesicle; and in the fourth stage only a pustule; hence, observes Hebra,—“Pustules are among the forms of efflorescence, which for the most part arise from pre-existing eruptions of a different character, and they therefore do not strictly deserve the name of primary symptoms, of which the distinguishing mark is, that they are caused directly by the original morbid products. As, however, the exudation which precedes the occurrence of suppuration beneath the epidermis, frequently escapes notice till it becomes converted into pus, and thus betrays its presence by its yellow colour, it often happens that pustules are the first perceptible morbid appearance, and hence one cannot help admitting them among the primary affections.” But, Gentlemen, we must remember that pus is in reality a primary formation, produced in a totally different manner from lymph; indeed it is not a mere exudation but a hyperplastic development occurring in the solid tissues themselves. It does not follow lymph as a modification of that fluid, and therefore as a secondary change; but it is substantially a new and primary formation in a part previously altered by morbid action. It may be a secondary process; but it is a primary lesion; and overlooking these nice distinctions, which are practically of little importance, we

may accept pustule without demur, as one of the most striking of the lesions accompanying disease of the cutaneous tissues.

The special characteristics of a pustule result from the varying depth of the tissue implicated in its development; when produced by the cells of the rete mucosum, its situation is wholly superficial; the tissue out of which it is formed is easily reproduced, and hence no trace of its presence is left when the skin is restored to health. This is the case in eczema pustulosum or eczema impetiginodes, also in impetigo, and in the pustule sometimes accompanying scabies in children. But when the substance of the skin is involved, and the pus is generated at the expense of the connective tissue, there results a destruction of substance which is not susceptible of restoration in all its integrity, and therefore a permanent mark in the form of a pit or cicatrix is left behind. In one of the severest forms of eczema pustulosum that may be presented to you, such as occurs on the face in eczema infantile, and gives rise to the hideous-looking mask of crusta lactea or eczema larvale, you may without hesitation predict a perfect immunity from cicatrix; whereas, in some other forms of pustule, and especially in variola, you know that the cicatrix is indelible, and must remain for ever a permanent deformity.

A superficial pustule, or vesico-pustule, is very generally unaccompanied with any special hyperæmia or alteration of the derma; but a deep pustule is always produced upon a hard and more or less congested base; the pustule of impetigo is an example of the superficial kind; that of ecthyma, of the deeper sort. This distinction was appreciated by the ancient Greeks, who styled the pustule without the inflamed base, *psydrakion*, meaning thereby a cold or non-inflammatory blister or pustule; and that with the inflamed base, *phlyzakion*, from *phluzein*, to be hot, a hot or inflammatory blister or pustule. Willan's definition of "pustule" is,—“An elevation of the cuticle, sometimes globate, sometimes conoidal in its form, and containing pus, or a lymph which is in general discoloured. Pustules are various in their size, but the diameter of the largest seldom exceeds two lines.” He indicates four kinds of pustules, which he terms — phlyzadium, psydracium, achor, and phlyctis. Phlyzadium is, as we have just informed you, the pustule with the inflammatory base represented by ecthyma; psydracium, the pustule without inflammatory base, namely, impetigo; and achor, a pustule peculiar to the follicles of the scalp. Phlyctis we no longer regard as a pustule, but as a large vesicle or small bulla.

The classification of pustules regarded as a primary lesion of the skin, is very restricted; limited, in fact, to impetigo,

ecthyma, and achor ; but besides these we have numerous instances of pustule presenting the character of a secondary lesion ; for example, acne and sycosis, wherein the follicles are principally concerned ; herpes, variola, gutta rosacea, furunculus, hordeolum, lupus, and pustular syphiloderma, the pustules in all these cases having the ecthymatous type, that is to say, being developed on a hard and inflamed base.

We have said that the typical colour of pustule is yellow, but a yellow varying in tint in accordance with the degree of concentration of the pus. When the preponderance is in favour of lymph and mucous cells, the colour is pale, milky, or primrose, while in the case of excess of pus-globules, the depth of yellow increases to a golden and sometimes to a greenish tint ; the greenish hue being referrible to an admixture with the pigment-matter of the blood. When pustules are bruised, or when their dermic base is highly congested and weak, blood is apt to be mingled with the pus in various quantity, and thereby to communicate a purplish and sometimes a livid hue to their contents. These remarks are applicable also to the scab or crust which results from the desiccation of the pustule ; it may be amber-coloured, or reddish-brown, or a deep black.

A pustule left to its normal course terminates by desiccation of its contents, accompanied with a shrinking and corrugation of its vesicle, and the formation of a dense and hard *scab*, which, according to the depth of tissue involved in its production, either rests lightly on the surface, or is more or less deeply embedded in the skin. The scab produced by the pustule of impetigo is quite superficial, and leaves no mark or cicatrix when it is shed ; but the pustule of ecthyma, as it sinks more deeply into the substance of the skin, and destroys the papillary layer of the derma, which cannot be restored, is followed by a pit and by a cicatrix of life-long duration. But the pustule not unfrequently bursts, or is broken accidentally, and then, the pus being set free, dries upon the denuded surface and forms a *crust* of variable extent ; and the crust may be modified in colour, in thickness, and density, by a variety of conditions. The yellow crust of impetigo suggested to the Greeks the term *melitagra*, from *meli*, honey ; in consequence of its resemblance to dried honey ; while the mask-like crust of eczema impetiginodes or eczema pustulosum of the face and head, called also *crusta lactea*, and *porrigo larvalis*, or *eczema larvale*, is very commonly greyish or greenish, and generally, from admixture with blood, in parts brown and even black. When, however, the pustule is broken, the exposed surface sets up a secreting process, which results in the production of a quantity of discharge, which may be principally

purulent, or only partially purulent, and the density of the secretion will be the occasion of a difference of density of the crust, the pure pus producing the most dense form of crust, and that which is diluted with serum, producing one which is spongy and light, and probably of considerable thickness.

Therefore, in the consideration of pustule we have not only to bear in mind its manner of development, its colour, and its contents, but also its mode of disappearance. It will very probably leave behind it indelible signs, by which the disease to which it belonged may be recognized to the end of life; such, for example, is the cicatrix of the vaccine pock, the cicatrix of variola, the cicatrix of lupus, and also that of syphiloderma.

The pustule also brings before us another phenomenon which deserves our attention. We have said, that pretty constantly it is preceded by an exudation of lymph: hence we have to consider as belonging to the process of pustule-formation, a lympho-genesis as well as a pyo-genesis; but there is present besides, another operation, namely that by which the pus is circumscribed and limited to the spot in which it is produced: this is effected by a kind of hypertrophy of the connective tissue, which gives rise to a wall or cyst by which the pus is surrounded. There are consequently three different forms of manifestation of the morbid process, which may very possibly represent degrees of force, or stages of diseased action, present in the development of a simple pustule. There is the force which occasions the primary lymph-exudation; the pus-globule-generating force; and the circumambient wall-producing and limitary force. In noting these phenomena we have an explanation of the *plus* or *minus* of the three elements of the pustule-forming process, of the preponderance of lymph in one case, of pus-globules in the other; of the production of pus or pustules at one point, of lymph or vesicles at a neighbouring point, and we have also an explanation of the nature of a phlyctænoid or vesicular pustule that not unfrequently shows itself in children possessing a weak and delicate skin, namely, *impetigo phlyctænodes*. This form of eruption begins as a pustule; but, the limitary process being weak, the morbid action creeps for a small space into the surrounding tissue, and wanting the pus-generating force, throws out an exudation of lymph and produces a vesicle. Hence, we find developed a kind of compound lesion, a phlyctæna possessing the compound character of a pustule at the centre and a vesicle at the circumference; the vesicular elevation being sometimes a circle of coherent vesicles, and sometime a single circular or annulate vesicle.

BULLA, or bleb, or blister, the *pemphix*, *pomphos*, and *pompholux* of the Greeks, is a large vesicle, identical in structure and contents with a vesicle, developed in a similar manner, and running a similar course. Its chief characteristic is size; hence, in the language of Willan, it is "a large portion of cuticle detached from the skin by the interposition of a transparent watery fluid." Or we may regard it as the superlative degree of vesicle, the positive degree being vesicula, and the comparative, phlyctæna or phlyctis. The *size* of the bulla may range from that of a large pea to that of an egg or an orange; in *figure* it may be hemispherical or globular, sometimes oblong, sometimes crescentic, sometimes tense, shining, and transparent, and sometimes wrinkled and opaque. While its *contents*, which are usually clear, transparent, and colourless, like water, may be amber-coloured or purplish, without loss of transparency; or they may be opaline or lactescent, or yellowish, or purplish, and opaque.

The development of a bulla is sometimes a specific action of the skin, accompanied with a specific hyperæmia, as in the instance of pemphigus; and sometimes, as in erysipelas, a secondary process resulting from a previous state of œdematous infiltration of the cutaneous tissues, and acting the part of drain to the accumulated fluid. In both instances the contents of the bulla are the same,—a serous fluid, albuminous and moderately alkaline, and sometimes holding in solution bile-pigment, and occasionally urea and uric acid; while its seat is the epidermis between the corneous layer and the rete mucosum. When of large size, it begins by several small vesicles, which quickly unite; and having increased to a considerable bulk, the circumference creeps along the surface, taking in more and more of the surrounding skin. It is this creeping quality that constitutes the chief distinction between vesicula and bulla; the former being fixed and rarely increasing by its base; the latter running along the surface to a more or less considerable extent. The bulla likewise is sometimes deficient in areola and sometimes surrounded by a narrow streak of redness.

The period of duration of a bulla is several days; very frequently it rises up in the course of a few hours, or it may increase gradually during several days; and having completed its development, it is either broken, or its fluid evaporates, and the containing sac of cuticle becomes wrinkled and collapsed, and subsides by degrees upon the excoriated base. In this way it forms a thin crust, which remains adherent for a while, and exfoliates in the form of a scale; at other times the excoriated base is converted into a secreting surface; and a thicker crust is produced, sometimes greyish or brownish, and sometimes almost black from admixture with blood.

As an idiopathic affection, bullæ are met with in pemphigus and pompholyx, and symptomatically in erysipelas; in syphiloderma constituting rupia, in pernio or chilblain, and in elephantiasis anæsthetica. They are also produced artificially in burns and scalds, and by the application of epispastics.

SQUAMA or scale, in a general sense, is a lamina of cuticle separated from the surface of the skin; but in its special character of a primary cutaneous lesion, the term is intended to signify, in the language of Willan, "a lamina of *morbid cuticle*." A desquamation of cuticle, or exfoliation of cuticular scales, taking place after a previous state of hyperæmia of the skin, as in scarlatina or measles, is necessarily a secondary lesion; but our business at present is to fix your attention upon a *primary squama*, such, in fact, as accompanies alphas, the lepra vulgaris of Willan; the secondary squamæ shall be considered hereafter. If we have the good fortune to see a case of alphas at its earliest appearance, we shall probably discover papulæ in no respect differing from the papules of lichen; it may be uncertain whether the lesion will remain a papule, or whether it may become a vesicle or a pustule; but in a short time, sometimes in a few hours, a white glistening cap of altered cuticle appears on the summit of the papule; and we are enabled to recognize the first development of a squama.*

The *primary squama* is therefore a lamina of morbid cuticle, and the chief example of the lesion is met with in alphas, the lepra alphas of the Greeks, the lepra vulgaris of Willan, the misnamed "psoriasis" of the foreign schools. The squama of alphas is a portion of cuticle developed upon a base of morbid derma, and as a consequence, is itself a morbid product. Its abnormal characters are, its whiteness,—hence the term alphas (albus), its porosity or sponginess, its opacity, its laminated structure, its dryness, its friability and brittleness, and its tendency to decadence; the whole of these qualities being referrible to imperfect elaboration of the cell-elements of the epidermis. The cells retain more of the albuminoid than of the corneous character; they are turgid with serous fluid, and when subsequently they are desiccated by evaporation, the spaces previously occupied by fluid become filled with globules of air: hence arise the lightness, the sponginess, and the silvery brilliancy of the scales.

The squama of alphas ranges in *size* from a line to an inch or more; it is generally circular in *figure*, and from half a line

* *Vide* Alphas punctatus and Alphas papulosus, JOURNAL OF CUTANEOUS MEDICINE, vol. i. pp. 209 and 114.

to a line in thickness. The circular disc is depressed in the centre, which is more dense and horny than the rest ; farther from the middle point it is thick, spongy, and laminated, and at the extreme periphery presents the thinness of a single lamina. The first-produced scale is always the most complete, and when removed, its place is usually taken by several smaller and less perfectly constructed laminæ. Like all morbid tissues, it presents varieties bearing relation to its greater or less divergence from the normal standard ; sometimes it is as thin as the scales of bran, suggesting the term pityriasic ; sometimes it is almost horny ; and sometimes it is irregular in figure, from the unsymmetrical blending of the several papules or tubercles on which it is produced.

But besides the scale of alphos there is another form of scaliness which deserves to be considered as a primary lesion ; namely, the flaky and pulverulent desquamation which accompanies *phytosis versicolor*, the pityriasis versicolor of Willan. In this disease, as in alphos, there is a degeneration of structure of the epidermal cells ; they possess a granular character ; and thence the cuticle which they form is loose and porous, easily separable from the layers beneath, and, upon scratching or friction, breaking up into small flakes and powdery fragments. This breaking up of the cuticle is supposed to be due to the destructive operation of a vegetable parasite, the microsporon furfur ; certainly it is the consequence of a phytiform growth, or a phytiform degeneration of the cell-structure of the epidermis, but we are unwilling to regard the granular elements of which the desquamation is composed, as an independent vegetable organism.

The scale of alphos, beginning at a central point, increases by the circumference, creeping slowly over the surrounding skin ; hence it happens that the centre of the disc is much older than the circumference ; hence, also, the greater density and thickness of the central portion than of the border ; and hence also the imbricated appearance of the surface of the scale. Its adhesion to the surface beneath, although occasionally firm, is generally very slight ; hence it is easily rubbed off by the friction of body-clothes or bedclothes, and when it is removed, it exposes the red and prominent surface on which it was produced, the latter being invested with a thin layer of transparent cuticle.

TUBERCULUM, literally a little tuber or tumour, or tubercle, is a solid prominence of the skin, larger than a papula and smaller than that greater or more extensive prominence which is denominated tumour. The difference between papula and tuberculum is simply one of bulk ; and the same between

tuberculum and tuber; hence a point exists, when we may be in doubt whether to term an eruption, one of large papulæ or small tubercles; and, on the other hand, whether large tubercle or small tumour. In determining the size of an ordinary papule, we stated its breadth at one or two lines; and of a large papule which might under certain circumstances be considered as a tubercle, at three lines, that is, a quarter of an inch. So in fixing a limit to the size of a tubercle, we may start with a quarter of an inch, and allow of a progression of another quarter of an inch; thus estimating its size at a quarter to half an inch in diameter. Hebra's estimate of the size of a tubercle corresponds with this. It is, he says, "as large as a lentil, bean, or hazel nut."

The resemblance of papula and tuberculum is not altogether one of similitude only: a papula by growth may reach such a size that it would be more correct to term it tubercle than papule. As a papule, its seat might be limited to a single cutaneous follicle, whereas the implication of two or more follicles would constitute a tubercle. This we see illustrated in alphas, which begins as a small pimple, and spreads out to a breadth which entitles it to the denomination of tubercle. In lupus we often perceive a similar phenomenon, but the transition of papula into tubercle is most remarkably shown in syphiloderma; a first eruption of constitutional syphilis is generally one of erythema and stigmata; the second will be one of papulæ, and receive the name of lichen; while a third or fourth, or a subsequent evolution of the disease at the stage termed tertiary syphilis, will be a tubercle: this latter is the form of eruption which is so commonly confounded with that other tubercular affection, alphas, and which we see described, but very incorrectly, by the name of syphilitic alphas (*lepra syphilitica*, *psoriasis syphilitica*).

Willan's definition of tubercle leaves little room for improvement:—"A small, hard, superficial tumour, circumscribed and permanent, or suppurating partially;" and if we turn to his examples of the lesion, we find phyma, verruca, molluscum, acne, sycosis, lupus, elephantiasis, and framboesia; we omit vitiligo as having crept into the group in error.* Phyma includes the family of boils or furunculi, and also anthrax; but it will at once occur to you that certain furunculi deserve to be termed tumour, rather than tubercle, while anthrax or carbuncle is a decided tumour. Molluscum, again, not unfrequently reaches the bulk which is correctly expressed by the term "tumour." On the other hand, as far as mere size is

* *Vide* JOURNAL OF CUTANEOUS MEDICINE, vol. i. p. 108.

concerned, acne and sycosis are instances of pimples rather than of tubercles. But Willan, in the latter part of his definition, namely "suppurating partially," points out a special character by which he endeavours to distinguish papulæ from tubercula; the papulæ of Willan, namely, lichen, strophulus, and prurigo, have no disposition to suppurate—their habit is to subside and disappear; but the papulæ included under the head of tubercula have a suppurative propensity; for example, acne and sycosis.

Tubercles present some variety of seat, of elevation, of colour, figure, and density. They may be situated on, or in the substance of the skin; they may be very slightly or very considerably elevated; they may evince no departure from the normal tint of colour of the integument, or they may be red or white, yellow or purple, or livid or black; they may be round or oblong, annulated or crescentic; and they may be dense or soft, solid or hollow, homogeneous or filled with fluid contents. The family of verrucæ and tegumentary nævi occupy the surface of the skin; alphas and some of the syphilodermata, its papillary layer; while tubercles formed by enlargement of the sebiparous glands are *situated* for the most part in the substance of the corium, as are the various forms of hypertrophy, for example, lupus, cheloides, and the tubercles of elephantiasis. The tubercles of urticaria, of syphiloderma, and alphas, are sometimes scarcely raised above the level of the skin, and their *prominence* is discoverable by the touch rather than by the eye; the tubercles of acne, sycosis, cheloides, verrucæ, and tegumentary nævus, sometimes reach one or two lines in elevation; and those of elephantiasis, molluscum, and furunculi, are often still more prominent. The *colour* of tubercular prominences caused by tegumentary nævus, by the enlargement of sebiparous glands, and sometimes by cheloides, in nowise differs from that of the healthy integument; the tubercles of molluscum sebaceum, of sebaceous accumulations, of epithelioma and cheloides, are sometimes white; the tubercles or wheals of urticaria are generally white or yellowish; other tubercles, such as those of syphiloderma, of alphas, of acne, of sycosis, of furunculus, and of elephantiasis, are more or less deeply red; while in a torpid or congested state of the circulation the red deepens into purple, and even into livid; and in pigmentary nævus, and where melanosis infects the skin, the tubercles are black. The *figure* of tubercles is commonly round, but the wheals of urticaria very frequently present elongated ridges or stripes, and sometimes segments of a circle. The tubercles of declining alphas are often annulated, as are those of tubercular syphiloderma, and occasionally they appear in

the form of segments of a circle and semilunar curves. The *density* of tubercles is influenced by their solid or hollow texture, by the nature of the tissue involved, and by the contents of their internal cavities when such exist. The tubercles and wheals of urticaria are sometimes soft and sometimes hard to the touch; the tubercles of cheloides are firm and resisting, sometimes as rigid as cartilage; the tubercles with contents are sometimes hard and sometimes soft; the tubercles of common verrucæ are firm and harsh, while those of acrochordon and molluscum fibro-areolare are loose and compressible.

The proximate cause of tubercles presents the same kind of variety that we have already seen manifested by papulæ; sometimes the prominence is dependent on muscular spasm, as is the case with the wheals of urticaria; sometimes the enlargement proceeds from interstitial infiltration, as in alphas, syphiloderma, and elephantiasis; sometimes from accumulation within the cavities of glands, especially the sebiparous glands, as in molluscum sebaceum, and sebaceous tubercles; sometimes from a combination of both the latter processes, as in acne; sometimes from hypertrophy of tissue, as in cheloides, nævus hypertrophicus, acrochordon, molluscum simplex, and verruca; and sometimes from degeneration of tissue, as in some forms of syphiloderma, in lupus, and carcinoma.

TUBER, or tumour, the *phyma* of the Greeks, is a swelling of the skin, larger than a tubercle, and embracing every degree of dimension, from half an inch to many inches in diameter. Hebra compares the maximum size of a tubercle with a hazel nut, and the minimum size of a tuber with a walnut. In tuber, tuberculum, and papula, we have presented to us a comparative series of enlargements, as we have before seen to be the case in the instance of vesicula, phlyctæna, and bulla; and in both instances the determination of the class to which a given enlargement belongs must be left to the judgment of the observer.

The most familiar example of a tuber that we can present to you, is the *tumor cysticus*, the encysted tumour or wen, which may be so small as to fall into the category of tubercle, or, on the other hand, may be as large, or larger, than a man's fist, a common average size being one inch in diameter. The observation of encysted tumours shows us that tumours may be only slightly or very boldly prominent, hemispherical, and sometimes spherical with a pedunculated base. The seat of an encysted tumour is a sebiparous gland, and its contents the epithelial and secreted product of that gland; hence the tumour may be hard or soft, in proportion to the

solidity or fluidity of their composition, and the skin covering it may be unchanged in appearance; it may be attenuated until it assume the appearance of parchment, or it may be reddened or purplish, from hyperæmia or congestion.

Other examples of phymata, are the common boil, the carbuncle or anthrax, hypertrophic conditions of the cutaneous and subcutaneous areolo-fibrous tissue, as in molluscum simplex and some local forms of spargosis, and degenerations of tissue, such as the tumor gummatous of syphilis and the tubera of lupus and carcinoma. A glance at these examples will show you that as some take their origin in inflammation, some in accumulation of secreted products, some in hypertrophy of tissue, and some in neoplasma or new formation, the physical characters of the tumours must be as varied as their pathological structure. Hence the tuber may offer as great a range of variety in physical signs as the other lesions of its class, namely, the papulæ and tubercula; it may be prominent in a greater or less degree, and it may present every degree of colour and density.

MACULA, a spot, a stain, a mark, is the simple signification of this term when applied to the diagnosis of a lesion of the skin. It is the ninth of the lesions to which we have drawn your attention, and it is unlike all the rest in being independent of inflammation or of inflammatory processes. Willan defines *macula* as "a permanent discoloration of some portion of the skin," and Hebra includes under it "every change in the normal colour of the skin arising from disease." We have a homely illustration of maculæ in the yellow spots of lentigo or freckles; and we find further illustrations in the purple spots and marks of purpura; in the red, the blue, and the black spots of nævus; and in pigmentary discoloration in general; for example, in the melasmata, the chloasmata, and also in leucasmus. The majority of these maculæ are in reality "permanent," as intimated by the definition of Willan; but the maculæ of purpura are only temporary; hence possibly the word "stationary" would be better than "permanent," as expressive of a more fixed character than that which belongs to the transient hyperæmiæ and inflammations, and yet falling short of the idea which is conveyed by the word "permanent."

Colour is one of the first of the features that attract our attention when entering upon the consideration of maculæ; then follow, *figure*, *extent*, and *pathological nature*. Their colour is sometimes due to the blood, which gives us varied tints of red, of purple, of livid, or black; sometimes to the accumulation of pigment in the rete mucosum, which contributes various hues of yellow, brown, grey, and black; and some-

times to the absence of pigment, as in the various examples of achroma. In vascular nævi, the blood is contained in a plexus of minute vessels, and their colour may be scarlet or crimson, as in arterial nævi; or purple or livid, as in venous nævi. Whereas in purpura the blood is effused into the tissues immediately surrounding the vessels, is crimson at first, then purple, and afterwards black, before it undergoes its retrogressive or fading changes, and finally the spot loses all claim to permanence by disappearing completely. The distinction between nævus and purpura affords us an additional lesson; the one being due to blood contained in pervious vessels, is dispersed by pressure, but the colour returns as soon as the pressure is withdrawn; the other, depending on extravasated blood, remains unaltered however much pressure be exerted, and becomes even more conspicuous from the contrast of the coloured mass with the whiteness of the compressed skin. In maculæ due to abnormal pigmentation, the colour is seated in the rete mucosum, and the tints may range from the yellow of xanthochroia, xanthelasma, and lentigo, through the yellowish-green and yellowish-brown of chloasma, to the deep brown, the grey, and the black of spilus and melasma. While the absence of pigment from the rete mucosum may give rise to achroma or leucasmus, and the same may occur from destruction of the rete mucosum as in maculæ atrophicæ. The pigmentary maculæ are truly permanent, and undergo no change of tint under pressure.

The *figure* of maculæ, for the most part round or oval, as in lentigo and the petechiæ of purpura, may present itself in the form of stripes, as in vibices, and lineæ atrophicæ; they are sometimes circular or annulate in elephantiasis; and islet-shaped or irregular in chloasma and melasma. And in point of *size* they are apt to exhibit infinite variety, ranging from a mere point in lentigo, to a patch of considerable extent in melasma.

The pathological nature of maculæ we have already anticipated in grouping them, primarily, into such as are due to the blood, and such as are due to the presence or absence of pigment; in the former section distinguishing between the blood *in* the vessels and the blood *out of* its vessels. In the latter section, we may further note the difference between a normal and abnormal state of the rete mucosum; and a positive loss of the true seat of colour of the skin, the rete mucosum, as in maculæ atrophicæ.

And now, Gentlemen, in concluding the subject of *primary lesions* of the skin, let us devote a few minutes to a recapitulation of the chief points of practical interest which their investigation suggests. These lesions have sometimes been

termed *anatomical*, but we believe that you will agree with us in opinion, that they are no more anatomical than is tubercle of the lung, but, on the contrary, that they are essentially *pathological*. The chief value of the pathological lesions is their direct bearing on *diagnosis*, and their adaptability to the determination of the nature of a disease. And therefore we wish you to put yourselves in the position of an inquirer seeking to distinguish a disease of the skin which may be brought before him. What is the most prominent lesion that meets your eye? Is it *rubor*? then the case must be one of hyperæmia,—maybe an erythema, a roseola, the first stage of a zymotic exanthem, or an erysipelas. Is it *papula*? then you have before you a lichen, a prurigo, an eczema papulosum, or what may be termed an accidental papula, such as acne, sycosis, a sebiparous hypertrophy, or a sebaceous accumulation. No; the prominence is too large for a papula; it must therefore be a *tubercle*, a tubercle of urticaria, of alphas, possibly a strumous, or carcinomatous, or leprous, or syphilitic tubercle; a tubercle from accumulation of secretion, like molluscum sebaceum, or a tubercle from hypertrophy of tissue, such as molluscum fibro-areolare, or cheloides. Are you still doubtful in reference to magnitude? Then the enlargement is a *tumour*, perchance a furunculus, an anthrax, an encysted tumour, a molluscum fibro-areolare, a spargosis, a cheloides, or a gummed syphiloderma. How many diseases we have already passed in review, indeed, we have omitted some, and as yet we have taken under our consideration only *four* lesions, or if you please merely *two*; for as we have already shown, a tubercle and a tuber are nothing more than magnified papulæ.

Or perhaps the pathological lesion is a minute drop of transparent serum enclosed in a thin case of cuticle,—in other words, a *vesicle*. Then you have before you an instance of eczema, of miliaria, or maybe of herpes. Or, the vesicle, stretching beyond its accustomed limits, is a bleb or bladder rather than a vesicula, in truth is a *bulla*; and then the case is one of pemphigus. Instead of serum, the vesicle possibly contains pus, and so constitutes a *pustula*; the pustule is minute, a mere vesicle filled with pus; in that case it is impetigo; no, it is large, with a hardened base and involves deeper structures, then it must be ecthyma; perchance it is a pustule of lupus or syphilis, and may result in an ulcer; or it is seated on the scalp, occupying the hair-follicles, which seem for the nonce converted into fountains of slimy pus, in which case it is a kerion; on the face or back it may be a pustular acne; on the face alone, a pustular gutta rosacea, or on the hair-bearing parts of the face, a sycosis or mentagra.

But, Gentlemen, that which attracts your attention is neither rubor, papula, vesicula, nor pustula, neither is it tuberculum, tuber, or bulla; it is a white scale that looks like a fragment of wafer stuck upon the skin,—it is, in fact, *squama*, and the disease is *alphos*; and you must guard yourselves at this point, from confounding a laminated scale of morbid cuticle like that of *alphos*, with a mere exfoliation or desquamation of normal cuticle. It is possible that with desquamation, there may be a yellowish and reddish-brown or greenish discoloration of the epidermis, and the patches may be distributed maplike on the trunk of the body and bends of the neighbouring joints, in which case the disorder may be the *pityriasis versicolor* of Willan, or, named more in accordance with modern knowledge, *phytosis versicolor*. Finally, Gentlemen, we need not again remind you of the distinguishing characters of *macula*, of its spots and stains, of its varied colours and varied forms, and especially of the absence of inflammation, which directly or indirectly is present in all the other lesions. But we will ask you to transcribe and commit to memory the table which we have here set before you.

Rubor	...	...	...	Pustula.
Papula	...	{	Tuberculum	Squama.
Vesicula	...		Tuber	Macula.
			Bulla	...

ON TERMINOLOGY. By RICHARD D. HOBLYN, A.M.,
Oxon.

“We call a nettle but a nettle; and

The faults of fools but folly.”—CORIOLANUS, ii. 1.

“WHAT’S in a name? That which we call a *Rose*, by any other name would smell as sweet.” And, by parity of reasoning, such a name as *Picrotoxin* adds nothing to the bitterness of taste of the substance it represents. And so we ought to be stoical, and discard the association which connects pleasant ideas with pleasant sounds; and philosophical, and think no worse of a racking malady or a nauseous remedy, because it is described or presented to us in dysphonious terms. Well, to satisfy the irrepressible development of nomenclature, we will become stoical philosophers, and accept with as good a grace as we can command, this, among the numerous evils which “flesh is heir to;” we will try, with all patience, to spell, read, and commit to memory,

the sesquipedalian terms of learned authors; we will not dispute their right to ransack the languages of old Greece and Rome, with the laudable purpose of discovering combinations which Demosthenes and Cicero never dreamed of; we will be docile, and endeavour to understand the recondite meaning which underlies our vexed Terminology.

But there is a preliminary requirement. The task-master must understand his lesson. He must not only know what he *means*, but he must mean what he *knows*. He must not attempt to enforce upon us what is faulty in combination or orthography; still less should he aim at giving a "local habitation and a name" to ideas as perishable as the terms in which he clothes them. Our patience is directly proportionate to his judiciousness; and if the latter be found wanting, the former will unavoidably be succeeded by disappointment, if not by contempt.

Now why, of all subjects which are dignified by the name of science, should medicine find itself in the most uneasy state respecting the terms by which its professors aim—or should aim—at revealing to an anxious world the arcana of their studies? It is not so in other cases. True, a "little war" was fought for the naming of the last-discovered planet; but that having been amicably adjusted to the satisfaction of each belligerent, the entire kosmos of the heavens is independent of the criticism of the most fastidious terminologist. It will be said that the cases are not parallel; that the one is comparatively simple, the other complex; that we cannot designate our diseases by the names of the gods, goddesses, or heroes of antiquity; that we cannot, for instance, courteously call syphilis (whatever that word may mean) *Aphrodité*, or enteroplomphalocoele, *Jupiter*, or apply the elegant names of the ever-increasing asteroids to the inelegant and ever-increasing maladies of man. It will be further urged, that, as diseases, like articles of food, are ever varying,—the one, perhaps, having an intimate relation with the other,—the sphere of observation enlarges proportionately, and must be met by a commensurate nomenclature.

All this is granted. But complexity does not necessarily involve confusion. A steam-engine is a complex machine, but it is by accident or carelessness only that a boiler bursts. Obscurity of description presupposes obscurity of thought. A clear view may be clearly expressed. Let us take, at random, a few cases of perplexed etymology. A student, who has mastered enough of Greek and Latin to recognize the terms derived from these languages, meets with the word *Melitagra*, and at once decides that it has to do with honey,

and a seizure; that it denotes, in fact, a *honey-seizure*, and that it distinctly relates to the operation of bees, which “gather honey all the day” (weather permitting) “from every opening flower.” Referring, however, by accident, to the work of an eminent dermatologist, he reads, to his amazement, “*MELITAGRA*, an exudative disease, emitting a discharge like honey; one of the symptoms of *eczema pustulosum*, vel *impetiginodes* of the face.” What, “did he mean all that by shaking his head?” asks the astonished Sneer. “Every word of it,” answers the placid Puff, “if he shook his head as I taught him.” Exactly; if the student only knew what I meant by the word. Bold in the cause of truth and simplicity, the student ventures to modify the term: *melitagrion* would, at all events, give us *wild honey*, minus the seizure. But why *wild*? The Greek tongue is accommodating, and readily admits the word *melirrhoé*, or *melitorrhoé*, if preferred, which simply means a *honey flow* or *flux*. He has only, then, to adjust his ideas of a “morbid exudation,” and honey, and he will then, perhaps, have exhausted the power of terminology in the particular case. The term, thus improved, not only eliminates the gratuitous act of violence; but has, in its very utterance, a liquid flow, almost suggesting that of honey; though not, perhaps, of a morbid exudation.

Our student next encounters the word *Mentagra*. “Seizure” again, and this time of the chin! A *chin-seizure*. Disguising the shock which he feels at the barbarous combination of Greek and Latin elements—a shock to which he has become accustomed, as the fish-wife’s eels to skinning—he contemplates what suggests a personal affront or a practical joke. It may, however, he thinks, be, after all, a dermatological word: other curiosities have occurred in that department of medicine. Again: he is astonished—perhaps by this time amused—at finding his suspicion well founded. *Mentagra* is “a rough, fig-like excrescence, occurring on the chin,” simply expressed by its pure Greek synonym *Sycosis* (σύνκωσις) or figginess. This term is classical enough, though a hypercritical student might, perhaps, observe that a palatable fruit is a somewhat infelicitous representative of an odious excrescence, and might indulge the idea (for students are humorous) that an epicure, in his eagerness to introduce a ripe fig into his *mouth*, had fallen short of his aim, and unhappily jammed it upon his *chin*. It never rains but it pours; so, having made a barbarous word, we proceed to stereotype it by novel usages, and forthwith appears its vegetable parent, under the botanico-dermatological designation, *mentagrophyton*—chin-seizure plant! Verily a student’s literary labour is no sinecure!

Next we have *Trichosis*, a term adopted by Mason Good as generic of all hair diseases. But the term denotes simply *hairiness*; and not all the specific designations, suggesting branniness and all kinds of abominable things, can impart a notion of morbidity to the natural growth which constitutes the pride of our soldiers, and, of late years, of most of our civilians also. If we persist in torturing the Greek word into compliance with our terminological perversions, the only remedy for the nation is—a razor. *Dermatosis*, we need hardly say, is in the same unhappy predicament; the remedy in this case, however, is a graver matter; viz., flaying. Then we have no fewer than half a dozen terms to designate the loss or impairment of the cerebral faculty of speech—*aphasia*, *aphemia*, *alalia*, *aphthongia*, *aphthenxis* or *aphthenxia*, and *aphrasia*—all derived from Greek words, and bearing pretty nearly the same meaning. But the first is classical, and therefore legitimate. Why not discard the illegitimate five? And now we are entertained with *Embolism*. What does it mean? *Ἐμβόλισμα* is a word of pure breed, suggesting “that which is put in; a patch.” But how does such a word suggest a *thrombus* or clot, disintegrated into minute particles, which are arrested in the capillary circulation? Even *Thrombosis* has made its appearance! Pathological anatomy has shown that such words are absurd, and are doing great harm; for they divert the mind from the pathological fact, to mere terms that have no meaning, at the best, and that are constantly misconstrued.

But a volume might be written on these amenities of literature, culled, as they may be, from every department of medical science. Pains, of all colours but one, are to be removed by the exhibition of a *green pain*, of course homœopathically. The

“venomed stang,
That shoots my tortured gums along,”

is to be “cured in an instant” by an *odontalgic* application, which professes, by its etymology, to *cause* the “stang.” Spottiness of skin is compared with the integument of a calf, as if one calf in twenty had a spotted skin, and as if, in the twentieth supposed case, its mother had not been spotted before it. But the reader has probably already exclaimed—“Ohe, jam satis; trecentos inseris, ohe.”

The confusion created by words terminating in *-odes* and *-(o)ides*, two classical affixes of perfectly distinct meaning, is felt by Mr. Hutchinson, who, in a paper written by him in the JOURNAL OF CUTANEOUS MEDICINE (April, 1867), alluding to

the common name, "*eczema impetiginoides*," says—"This plan"—that is of etymology—"serves rather to imply *similarity in appearance*, than to indicate a *sharing in nature*, and is, therefore, frequently, if not almost always incorrect." This is to fight a phantom of one's own creation. The writer might have omitted the "almost," and simply written *impetiginodes*, aggravated by impetiginous eruption, thereby eliminating the notion of *similarity*, and conveying the idea of "sharing," or perhaps *fulness*. The difficulty, which has really no existence, might be removed, he thinks, by using the names of "both parents." In cases in which the characteristic symptoms of both lichen and eczema concur, to call the disease "lichenoid eczema" is to imply a disease essentially eczema, but looking like lichen, which it is not, but real lichen and real eczema occurring together. Quite right. "Lichen-eczema" would, he thinks, be a more correct name; and, on the same pattern, and for the same reasons, he proposes to use such terms as eczema-psoriasis, lepra-psoriasis, lupus-psoriasis, lichen-psoriasis, prurigo-pemphigus, porrigo-eczema, and others. In such combinations we are to understand, not a mixture of *appearances*, but a mixture of *maladies*; the disease in either case is to be viewed as a modified result, differing from each one alone, or exhibiting two definite results coexisting. This principle of connecting two entire substances by a hyphen is familiar, and not without its uses; but how is the relative importance of the two "parents" to be indicated? Which parent takes priority? Is it to be "lichen-eczema," or "eczema-lichen"? Is the more pronounced disease the *male* parent, and therefore placed first? In a few days, or hours perhaps, their relative position may be inverted, or their relative values may vary, like the price of the Funds—five-eighths of *male* predominance to-day, four-sevenths of *female* to-morrow. How is all this to be provided for by the compound hyphenated substantive representing the "modified result"—the parti-coloured offspring? "English," or "un-English" is not the question now. The true view and the judicious use of the two Greek affixes would prevent the whole difficulty.

Yet, oh! these synonyms! Is it not enough to have an unmistakeable "Bright's Disease," without being mystified with the unclassical *Albumenuria*? But the former term is unique, and reminds us of the old Roman practice of designating laws by the names of their propounders. We cannot do that in diseases. True, we have a Bright or two famous for detecting irregularities in the bodies physical and politic, but few men are so gifted. And we name our streets from men;

but this method has its limit. "Higginbottomizing" has been applied to the extensive employment of nitrate of silver; but *participles* are not convenient forms of speech for designating diseases, or remedial operations; *adjectives* are objectionable, as involving substantives, understood; *cancroid* is excruciating, *vittiligoidea* is outrageous. "In short," says Dr. Mayne, "as might be supposed to happen in some newly-revolutionized state, instead of possessing an authorized mint and well-assayed sterling currency, each individual coins for himself, according to his occasions and the materials he can command. The effect of all this is the introduction, from year to year, nay, almost from day to day, of many specimens that are rudely shaped and of doubtful quality, and the meaning of whose impress is scarcely discoverable,—of not a few that are literally base and spurious." But to return with our sigh, oh these *synonyms*! How they multiply our labour, burden our memory, and confuse our present ideas. Of what possible use can it be to know that *hydrophobia* was called by one writer *hygrophobia*; by another, *phobodipsia*; by a third, *pheughydros*; by a fourth, *brachyposia*; and so on, a dozen deep? Who uses these terms? If *hydrophobia* (a symptom, by the bye) sufficiently designates the disease, and is preferable to *mad-dog-bite*, by all means use it, and studiously forget all the others, as mere encumbrances of nomenclature, which amused the men of other times, but have lost all attraction for practical men of the present day. If *xanthelasma* answer our requirement, and it seems well suited for the purpose in "form and feature," by all means adopt it, and forget its antecedents, or—

"Hang the *calf-skin* on 'our' recreant limbs."

It is easy to find fault, easier, perhaps, than to suggest a remedy. But a remedy may be found. *Nil desperandum*. Hercules cleansed the Augean stables, and the rising generation may cleanse the literary impurities of their profession, *if they care to do so*. Indifferentism is the real antagonist. Let a Reform Bill be introduced; appoint a committee, and let it be an "instruction"—an instruction not to be cancelled or truncated by cross purposes—to proceed at once to action. Summon the whole rank and file of *hybrids*; tell them that they have long disgraced their profession, and that their services will be no longer required. Cut off the Greek *itis* tail of every Latin straggler, and tell him to repair the loss from his native resources, or make way altogether for his foreign rival. Lay down a law of "heads and tails," prefixes

and affixes—a law as stringent as those of the Medes and Persians; and provide that, in future, no one shall, under a heavy penalty, venture to introduce an exotic, without having ascertained its nature and capabilities. Do all this, and the scandal may cease to exist; but neglect it, and it is no difficult matter to foresee that, even in these days of progress and enlightenment, the stable will presently defy the labours of Hercules himself.

STATISTICS OF CUTANEOUS DISEASES IN THE MIDDLE AND HIGHER RANKS OF LIFE. BY ERASMUS WILSON, F.R.S.

IN the year 1864 we published the statistics of one thousand cases of cutaneous disease, under the title of “An Enquiry in the Relative Frequency, the Duration, and Cause of Diseases of the Skin.” The cases were taken consecutively, as they occurred in our daily practice, and ranged over a period of *five* months, namely, from the 1st of December, 1863, to the end of April, 1864. We now proceed to a similar analysis of another thousand cases, and in a similar manner, beginning at the end of April, 1864, and continuing onwards to the end of October of the same year, a period of *six* months. The whole period embraced by the enquiry is one year, short one month—the month of November; and, in our new analysis we shall take advantage of the preceding one, placing the separate results side by side in our analytical tables, comparing them together, and combining them whenever such an operation may serve to throw light upon the subject.

In the order of *frequency* we shall find *eczema* standing alone at the head of the column, immediately succeeded by its congener *gutta rosacea*, and followed by *madesis*, the representative of every form of loss of hair, and *alphos*, the *lepra vulgaris* of Willan. Here then is the answer to the question—What are the most common forms of cutaneous disease among the middle and higher ranks of society in Great Britain? for many of the patients whose cases are registered reside in Scotland, Ireland, or Wales.

Next after *alphos*, and constituting a *third* series, are *pityriasis*, *scabies*, *acne*, *syphiloderma*, *lichen*, and *tinea*. Fourthly, and under two per cent., follow *lupus*, *erythema*, *phytosis versicolor*, *prurigo* with *pruritus*, *sycosis*, *furunculus*, and *herpes*. Fifthly, and under one per cent., we have *impetigo*, *xeroderma*

with *ichthyodes*, *urticaria*, *melasma*, *strumoderma*, and *carcinoma*. Sixthly, from one-half to one-quarter per cent., *poliosis*, *kerion*, *nævus*, *trichosis*, *cheloma*, *leucasmus*, *ecthyma*, and *cacotrophia*; and then follow, in diminishing proportions, twenty-three other forms of disease; among which may be distinguished, *morbi unguium*, *ephidrosis*, *phakosis*, *pemphigus*, *elephantiasis*, *porphyra*, *malacosis*, *favus*, *morphœa*, *spargosis*, and *phtheiriasis*.

The whole number of forms of disease comprehended in this table of two thousand cases is fifty-six; but some of the forms include several varieties; for example: *madesis*, *prurigo*, *furunculus*, *xeroderma*, *morbi unguium*, and *morbi sebipari*. Again, it will be apparent that the relative proportions of these disorders can only be taken to apply to what may be termed "special cutaneous diseases," and those of a chronic type. Acute forms of disease do not seek the consulting-room of the practitioner, and the slighter, the commoner, and more universal diseases, are treated by the family attendant, and make no demand for special assistance. This is self-evident in the case of *furunculus*, *roseola*, *erysipelas*, *strophulus*, *varicella*, and some others of the list; for it would be erroneous to conclude that for every case of *furunculus* there occur among the population twenty-four cases of *eczema*, or five cases of *alphos*; or that for every case of *varicella*, there happen upwards of six hundred cases of *eczema*. The chief value of the tables, therefore, will be to compare the frequency of special cutaneous complaints, and the relative frequency of the commoner and of the rarer forms of cutaneous disease; for example, *eczema*, *alphos*, *scabies*, and *syphiloderma*; *acne*, *lupus*, *strumoderma*, and *carcinoma*; *ichthyodes*, *melasma*, and *cheloma*; and these, with *elephantiasis* and *morphœa*. From the very nature of the class of patients, we see a reason why *phtheiriasis* should occupy a place at the bottom of the table, although its congener, *scabies*, is not very far removed from the top. And we can also understand what differences may be found between a table drawn up from the sources herein referred to, and another founded on the practice of the hospital or of the infirmary. It may be noted further, that our colonies contribute their quota of the rarer affections, in the instance of leprosy, the *elephantiasis* of the Greeks.

I.—Table showing the Number of Separate Forms of Disease in the order of frequency.

	1st 1000	2nd 1000	Total 2000		1st 1000	2nd 1000	Total 2000
Eczema	298	325	623	Trichosis (hirsuties)...	5	2	7
Gutta rosacea	112	90	202	Cheloma (cheloides)...	5	2	7
Madesis (including alo-				Ecthyma	3	3	6
pekia, area, calvities	80	97	177	Cacotrophia	2	3	5
Alphos	73	70	143	Roseola	1	3	4
Pityriasis	43	50	93	Morbi unguium	2	2	4
Scabies	37	44	81	Myrmekiasmus (ver-			
Acne	55	24	79	rucæ).....	1	3	4
Syphiloderma	30	40	70	Stearrhœa	—	3	3
Lichen	30	35	65	Ephidrosis	2	1	3
Tinea (trichoborus) ...	39	21	60	Nævus hypertrophicus	3	—	3
Lupus	24	16	40	Rubeola	—	3	3
Erythema	17	19	36	Phakosis (lentigo) ...	—	3	3
Phytosis versicolor ...	15	15	30	Tumores encystici ...	2	1	3
Prurigo et Pruritus ...	13	14	27	Erysipelas.....	1	1	2
Sycosis	14	12	26	Pemphigus	1	1	2
Furunculus et Hordeo-				Atrophia cutis	1	1	2
lum	15	11	26	Elephantiasis	1	1	2
Herpes	11	12	23	Porphyra (purpura) ...	2	—	2
Impetigo	6	12	18	Malacosis (molluscum)	2	—	2
Xeroderma et Ichthy-				Acrochordon.....	—	2	2
odes	6	11	17	Favus	1	—	1
Urticaria	4	12	16	Morphœa	1	—	1
Melasma	8	6	14	Spargosis cruralis.....	1	—	1
Strumoderma	11	2	13	Varicella	—	1	1
Carcinoma	5	6	11	Congestio folliculorum	—	1	1
Poliosis (canities).....	2	7	9	Asteatodes	1	—	1
Kerion	4	5	9	Comedones	—	1	1
Nævus	6	2	8	Phtheiriasis	—	1	1
Leucasmus	4	4	8				

Arranged according to groups upon the plan which we have adopted for teaching, and to which we have given the name of CLINICAL CLASSIFICATION, the importance of eczema as the type of the *eczematous affections*, is still made manifest. Eczematous affections being followed, but at a considerable distance, by affections of the *hair-system* and *alphous* affections, and subsequently by *phytodermic*, *sebiparous*, *syphilitic*, *erythematous*, *strumous*, and *furuncular* affections. Distributed according to the clinical classification, the relative numbers of the different forms of disease may be seen in the following table :—

II.—Table showing the Number of Separate Forms of Disease
as arranged in classified groups.

I.—ECZEMATOUS AFFECTIONS.	1st 1000	2nd 1000	Total 2000	IX.—HYPERTROPHIC AFFECTIONS.	1st 1000	2nd 1000	Total 2000
Eczema	298	325		Nævus hypertrophicus.....	3	—	
Pityriasis	43	50		Acrochordon	—	2	
Lichen	30	35		Myrmecia.....	1	3	
Impetigo	6	12		Cheloides	5	2	
Gutta rosacea	112	90		Spargosis	1	—	17
Scabies	37	44	1082				
II.—ERYTHEMATOUS AFFECTIONS.				ATROPHIC AFFECTIONS.			
Erythema	17	19		Atrophia cutis	1	1	2
Erysipelas.....	1	1					
Urticaria	4	12		X.—ALPHOUS AFFECTIONS.			
Roseola	1	3	58	Alphos	73	70	143
III.—PEMPHIGOID AFFECTIONS.				XI.—STRUMOUS AFFECTIONS.			
Herpes	11	12		Lupus	24	16	
Pemphigus	1	1	25	Strumoderma	11	2	53
IV.—FURUNCULAR AFFECTIONS.							
Ecthyma	3	3		XII.—CARCINOMATOUS AFFECTIONS.			
Furunculus	14	11		Carcinoma cutis	5	6	11
Hordeolum	1	—	32	XIII.—ZYMOTIC AFFECTIONS.			
V.—NERVOUS AFFECTIONS.				Rubeola	—	3	
Pruritus	9	5		Varicella	—	1	4
Prurigo	4	9	27	XIV.—SYPHILITIC AFFECTIONS.			
VI.—VASCULAR AFFECTIONS.				Syphiloderma	30	40	70
Nævus vasculosus ...	6	2	8	XV.—LEPROUS AFFECTIONS.			
VII.—HÆMIC AFFECTIONS.				Elephantiasis	1	1	
Porphyra	2	—	2	Morphœa	1	—	3
VIII.—DEVELOPMENTAL AND NUTRITIVE AFFECTIONS.				XVI.—PIGMENTARY AFFECTIONS.			
Xeroderma et Ichthyodes.....	6	11		Melasma	8	6	
Cacotrophia cutis.....	2	3	22	Leucasmus	4	4	
				Phakosis (lentigo) ...	—	2	24

Table II. continued.

XVII. — PHYTODERMIC AFFECTIONS.	1st 1000	2nd 1000	Total 2000	XX.—AFFECTIONS OF THE SEBIPAROUS SYSTEM.	1st 1000	2nd 1000	Total 2000
Phytosis versicolor ...	15	15		Congestio folliculorum	—	1	
Tinea (phytosis tonsu- rans)	39	21		Stearrhœa.....	—	3	
Favus (phytosis favosa)	1	—	91	Asteatodes	1	—	
				Comedones	—	1	
				Malacosis seu mollus- cum	2	—	
XVIII. — UNGUAL AFFECTIONS.	2	2	4	Tumores encystici ...	2	1	
				Acne.....	55	24	90
XIX. — AFFECTIONS OF THE HAIR SYSTEM.				XXI. — AFFECTIONS OF THE SUDORIPAROUS SYSTEM.			
Madesis	80	97		Ephidrosis	2	1	3
Trichosis	5	2					
Poliosis	2	7		XXII. — TRAUMATIC AFFECTIONS.			
Kerion	4	5		Phtheiriasis	—	1	1
Sycosis	14	12	228				

The relative importance of the different groups may, however, be more conveniently studied by arranging them according to their numerical value, as in the following table, *e.g.* :—

III.—Table showing the Relative Number of the Forms of Disease when arranged in groups in their order of frequency.

Eczematous affections	1082	Developmental and Nutritive affections	22
Affections of the Hair-system	228	Hypertrophic affections ...	17
Alphous affections	143	Carcinomatous affections ...	11
Phytodermic affections	91	Vascular affections	8
Sebiparous affections	90	Zymotic affections	4
Syphilitic affections	70	Ungual affections... ..	4
Erythematous affections ...	58	Sudoriparous affections ...	3
Strumous affections	53	Leprous affections... ..	3
Furuncular affections	32	Hæmic affections	2
Nervous affections	27	Atrophic affections	2
Pemphigoid affections	25	Traumatic affections	1
Pigmentary affections	24		

In the gross number *sex* would appear to be pretty equally balanced. Thus, in the first thousand the males amounted to 498 and the females to 502, the latter preponderating over the former by a majority of four. In the second thousand the number of males was 478 and of females 522, giving an excess of 44 in favour of the latter; while in the entire two thousand the majority in favour of females over males was 48.

ECZEMATOUS AFFECTIONS.—Now, if we take the groups separately, we shall find the group of ECZEMATOUS AFFECTIONS made up of six different forms of disease; and arranging these forms in the order of frequency, they would stand as follows:—

IV.—*Table showing the Relative Number of Cases in the sub-groups of Eczematous affections.*

	1st 1000	2nd 1000	Total 2000
Eczema	298	325	623
Gutta rosacea	112	90	202
Pityriasis... ..	43	50	93
Scabies	37	44	81
Lichen with Strophulus... ..	30	33	63
Impetigo	6	12	18
	526	554	1080

ECZEMA.—Although in the total of diseases of the skin, the number of females exceeds that of males, in eczema the majority is found among the latter. Thus, in the first thousand the majority of males over females was 44; in the second thousand, 31; the majority in the whole two thousand being 75. It would seem, therefore, that the susceptibility of females to uterine disorders was compensated to them by their lesser liability to cutaneous affections, and especially to eczema.

The periods of life at which eczema is most frequent are infancy and manhood. Thus, of the two thousand cases of cutaneous disease at present before us, the total number of eczemata is 623, of which 40 represent eczema infantile, having occurred during the first year of infantile life, and 411 the forty years of manhood, ranging from twenty to sixty years of age; or, taking the whole number, after excluding the first twelve months, in periods of twenty years, they would stand as follows:—One year to twenty, representing childhood and

youth, 111; twenty years to forty, 219; forty years to sixty, 192; and sixty years to eighty, the period of declining age, 61; while the relative numbers of cases, in divisions of ten years, is shown in the following table:—

V.—Table showing the Age of Origin of Eczema.

	1st 1000	2nd 1000	Total 2000
During first year... ..	8	32	40
1 to 10 years	21	19	40
10 " 20 "	40	31	71
20 " 30 "	36	51	87
30 " 40 "	63	69	132
40 " 50 "	57	45	102
50 " 60 "	42	48	90
60 " 70 "	22	24	46
70 " 80 "	7	7	14
80 and above	—	1	1
	298	325	623

Eczema is essentially a chronic affection; sometimes of life-long duration, as in the instance of a neglected eczema infantile; and in taking periods of years, we find nearly one-third of the whole lasting from one to five years. Noting the duration of the disease at the time of presentation for treatment, we arrive at the following results:—

VI.—Table showing the Duration of Eczema at the time of registration.

	1st 1000	2nd 1000	Total 2000
Under one month	29	24	53
One to six months	89	88	177
Six months to one year... ..	30	37	67
1 to 5 years	85	105	190
5 " 10 "	27	31	58
10 " 20 "	23	26	49
20 " 30 "	12	8	20
30 " 50 " and upwards	3	6	9
	298	325	623

Eczema occurs more frequently in its dry than in its moist or *humid* form, in the proportion of two to one: and the manner of distribution of the disease amongst its six essential forms is shown in the following table:—

VII.—*Table showing the Relative Proportion of the Forms of Eczema.*

	1st 1000	2nd 1000	Total 2000
Eczema erythematosum	100	110	210
„ papulosum	42	33	75
„ vesiculosum	10	5	15
„ ichorosum	77	94	171
„ pustulosum	8	7	15
„ squamosum	61	76	137
	298	325	623

The humid forms, comprehending eczema vesiculosum, eczema ichorosum, and eczema pustulosum, number together 201; while the dry forms, represented by eczema erythematosum, eczema papulosum, and eczema squamosum, amount to 422. Besides these, which are the general forms, the distribution of the eruption was represented by some of the leading local forms in the following proportions, namely:—Eczema universale, 18; eczema manuum, 71; eczema capitis et aurium, 64; eczema faciei, 18; eczema pudendi, 14; and eczema articularum, 13.

The cause of eczema we have been accustomed to regard as debility, and in our former paper we established a division of debility in its relation to eczema into four kinds,—nutritive, nervous, assimilative, and local; nutritive debility comprehending feeble nutritive power, such as occurs in infancy and childhood; nervous debility, the rarest of the four forms, in which deficiency of nervous force leads on to the eczematous manifestation; assimilative debility, having its foundation in defective digestion and assimilation, and local debility, or lowered vitality of the part, originating, among other causes, in extremes of cold or heat, in injury or aberration of innervation, or of circulation. In this sense, the four forms of debility are represented by the following numbers:—

VIII.—Table showing the Proportion of Cases of Eczema referrible to certain forms of debility.

	1st 1000	2nd 1000	Total 2000
Nutritive debility	102	93	195
Nervous debility	32	4	36
Assimilative debility	142	219	361
Local debility	22	9	31
	298	325	623

Assimilative debility, as might *à priori* be inferred, and the more so when it is remembered how large a proportion of cases of eczema occur in middle life, is greatly in excess over the other forms, nutritive debility following next, and being succeeded, in the first place by nervous debility, and then by local debility.

The above causes we distinguished in our former paper as *governing predisposing causes*, to the production of which other and more *remote predisposing causes* mainly contributed. These latter causes we formed into groups, in the order of their frequency of recurrence, and they apply to the present one thousand cases as well as to their predecessors. Thus we found the chief remote predisposing causes of eczema originating in *nutritive debility* to be:—Errors of diet, weakly parentage, hereditary diathesis, vaccination, excessive or rapid growth, errors of air, exercise, or clothing, dentition, eruptive and malarious fevers, vicissitudes of cold, heat, and moisture, strumous diathesis, ungenial climate, deranged menstruation, uterine, reproductive, and puerperal derangements, sexual excess, deranged digestion, and constitutional disease.

The principal remote predisposing causes contributing to *nervous debility*, were:—Anxiety, fatigue, affliction, overstrained mental and physical labour, ungenial climate, uterine, reproductive, and puerperal derangements, weakly parentage, vicissitudes of cold, heat, and moisture, nervous shock and fright, deranged menstruation, errors of diet, derangement of digestive organs, gouty and rheumatic diathesis, and constitutional and organic disease.

The chief remote predisposing causes of *assimilative debility* were:—Derangement of digestive organs, vicissitudes of cold, heat, and moisture, constitutional and organic disease, anxiety, fatigue, affliction, ungenial climate, gouty and rheumatic

diathesis, overstrained mental and physical labour, transition of seasons, weakly parentage, hereditary diathesis, errors of diet, errors of air, exercise, cleanliness, clothing, uterine, reproductive, and puerperal derangements, eruptive and malarious fevers, deranged menstruation, general cachexia, sexual excess, hæmorrhage, and local injury or disorder.

And the remote predisposing causes of *local debility* were : Direct injury, cold, heat, irritants, varicose veins, friction, clothing and bedding, moisture with cold, and moisture with heat.

Thus, then, we assume that in the production of an eczema, there must be present, besides the *proximate* cause, that is, the morbid process in operation in the skin, a *predisposing* cause, a *remote predisposing* cause, and an *exciting* cause. The more common exciting causes are sometimes general, namely, such as would give rise to other forms of disease ; for example : excessive heat, cold acting on a heated body, or mental emotion ; and sometimes special, such as heat and moisture in the instance of the pudendum and flexures of the body, heat or cold, as in the instance of the face and head ; and local irritants, as in the case of the hands.

PITYRIASIS.—Pityriasis is an eczematous erythema, accompanied with a profuse production and exfoliation of minute epidermic scales, attended with much pruritus, chronic in duration, and commonly developed upon the scalp. It is sometimes a precursor and sometimes a sequela of eczema, and is very frequently associated with the presence of eczema in other regions of the body. The fifty cases before us, as do those of our previous thousand, show a somewhat greater number of females than of males ; the ages of inception of the disease range between two years and seventy, the greater number occurring in childhood and manhood, and the duration of the disease admits of being prolonged to twenty years, or even a lifetime. In the present thousand the predisposing causes are pretty equally divided between nutritive and assimilative debility, the former being in excess in the total number. With two exceptions, the eruption occupied the scalp, giving rise in ten cases to alopekia, or other disease of the hair, and associated to a greater or less extent with eczema or lichen. Three cases succeeded eruptive fever and constitutional disease, two followed phytosis or tinea tonsurans, one was a sequela of parturition, and one resulted from the shock to the nervous system occasioned by affliction. Two cases of the first thousand were examples of pityriasis rubra, one local, the other universal.

The figures representing these results, are :—First thousand,

21 males, 22 females; second thousand, 23 males, 27 females; and of the total 93, males 44, and females 49. In respect of age in the present thousand, 11 cases occurred under ten years, 7 between ten years and twenty, 13 between twenty and thirty, 9 between thirty and forty, and the remaining 9 between forty and seventy. Duration is represented by 14 under one year; 12, one year; 9, two years; 3, three years; 3, four years; 1, five years; 6, between five and ten years, and 2 lasting respectively fourteen and twenty years. Nutritive debility was present as a predisposing cause in 25 cases of the first thousand, 24 of the second, and 49 of the total two thousand. Assimilative debility, 9 in the first, 25 in the second, and 34 in the total; while nervous debility stood as a cause in 9 cases of the first thousand, 1 of the second, and 10 of the total; the total of the three being as follows:—49 nutritive; 34 assimilative; and 10 nervous.

LICHEN.—The papular eruption lichen, uncomplicated by any other symptom of eczema, occurs thirty times in our first thousand cases and thirty-five times in our second thousand, making a total of sixty-five in the two thousand. It is somewhat more frequent in the male than in the female, has a shorter duration than eczema, but obeys similar causes, predisposing, remote predisposing, and exciting. Next to lichen simplex, the more common forms were a pruriginous variety, lichen pruriginosus, 7 cases; lichen urticatus, 3; lichen planus seu ruber, 2; lichen circumscriptus, 2; lichen strophulosus or strophulus, 2; lichen circinatus, 1; with one example of a desquamating eruption, lichen squamosus. Lichen urticatus, a variety of the eruption usually limited to children, appeared in a man of forty. These cases also afford an example of the perpetuation of irritation of the skin, when once accidentally established; three were the sequelæ of scabies, and one of lichen tropicus, or prickly heat. One case illustrated the propagation of morbid sympathies, being associated with pregnancy, and one was excited by cold. The cases of lichen strophulosus occurred in children endowed with a morbid irritability of skin.

The figures representing the phenomena of lichen are:—In the first thousand, 19 males and 11 females; in the second, 17 males and 18 females; the total of each in 65 cases being 36 males and 29 females. The extremes of age were one year and seventy; 7 cases occurring under ten years, 1 between ten and twenty, 6 between twenty and thirty, 8 between thirty and forty, 6 between forty and fifty, 3 between fifty and sixty, 3 between sixty and seventy, and 1 at the age of seventy. The most fecund period of the disease is similar to

that of eczema, namely, between twenty and fifty years. In duration, the eruption lasted less than one month in 4 cases, between one and three months in 10, between three and six months in 9, between six months and one year in 3, one year in 4, two years in 2, and three, five, and fifteen years in the remaining 3. The proportions of predisposing causes were: Nutritive debility, 8; assimilative debility, 18; and nervous debility, 9.

IMPETIGO.—The pustular element of eczema, without other signs of the latter disease, is comparatively rare among the class of patients to which these statistics relate. The eruption occurs somewhat more frequently in the male than in the female; it attacks children by preference, is consequently due in general to nutritive debility, and is sometimes associated with an epidemic or contagious principle. In the first thousand cases there appear only 6 examples of the disease, in the second 12, and in the two thousand 18. The males are 10, and the females 8, in the total number. Nine out of the eighteen cases occurred in children under the age of ten, 3 between ten and twenty, 5 between twenty and forty, and 1 at sixty-four years of age. The duration of the affection was less than a month in 8, six months in 1, and a year and a half, three years, and five years in the remaining 3. Twelve of the eighteen cases were due to nutritive debility, and six to assimilative debility. The principal forms of the disease were impetigo figurata, numbering 13 examples; and impetigo phlyctænodes, 4; one only falling to the lot of impetigo sparsa. Twelve of the eighteen cases occupied the face and head; one was consequent on parturition; and one, in an adult male, was seated on the nose, and associated with ozæna.

GUTTA ROSACEA.—The rosy-drop is an eruption of an eczematous nature, occupying the face of adult persons, and chiefly of females. It originates in debility, most frequently assimilative, next nutritive, and sometimes nervous; is chronic in duration, and possesses close sympathies with the digestive and reproductive organs. In thirty-six out of ninety cases, the disorder first made its appearance between the ages of twenty and thirty; in twenty-six cases it first showed itself between thirty and forty; the youngest patient was fourteen, the oldest seventy-five. In two hundred and two cases, the males stood to the females in the relation of 34 to 168. The obstinate persistence of the complaint is shown by the fact that in three instances the disease had lasted 20 years; four cases had been in existence between 15 and 20 years; thirteen cases between 10 and 15 years; twenty-

four cases between five and ten years; and one hundred and thirteen cases between one year and five. The relative proportion of the forms of manifestation of the disease in 90 cases was:—*gutta rosacea papulosa et tuberculosa*, 43; *gutta rosacea erythematosa*, 37; and *gutta rosacea pustulosa*, 10.

The figures representing the statistics of *gutta rosacea* are as follows:—First thousand, 17 males, 95 females, making a total of 112; second thousand, 17 males, 73 females, making a total of 90; or 202 in the two thousand. The age of outbreak of the eruption gives 9 cases under twenty, 36 cases between twenty and thirty, 26 cases between thirty and forty, 15 cases between forty and fifty, and 4 cases above fifty, in a total of ninety. The duration of the disease is shown in 122 cases, 3 having been in existence between twenty and thirty years; 4, between fifteen and twenty years; 13, between ten and fifteen; 24, between five years and ten; 113, between one year and five years; and 45 under one year. The forms of debility in 90 cases were, assimilative, 71; nutritive, 15; and nervous, 4. The forms of manifestation have been already stated.

SCABIES.—The principal points of interest in connection with Scabies are, its frequency in comparison with other affections of the skin; its duration; the forms which it may assume, and its occasional complications. Our present statistics help us only partially as to the frequency of the disease, inasmuch as they are drawn from a rank amongst whom scabies less frequently intrudes than amongst a lower class; and secondly, a single instance of the disorder, say in a father, may possibly represent a family, in which are included wife, children, and servants: therefore we must take the actual number as representing scarcely a fourth of the real number. In the next place, the duration of scabies simply implies oversight or neglect; and thirdly, the forms assumed by the eruption are for the most part a mere consequence of the susceptibility of the skin. Sex and age have little or no influence in scabies; if the disease is more common in children than in adults, the fact may be explained by the greater number of the former amongst the members of a family. Again, in scabies we have no necessity to seek for debility or causes of deterioration of health, the one and simple cause, the *acarus*, pastures as happily on the epidermis of the healthy as of the invalid. Only one special phenomenon belongs to scabies, namely, its secondary effects, the secondary eczematous eruption, which is often prolonged for weeks or months after the *acarus* is completely destroyed.

Thirty-seven cases of scabies in the first thousand, and forty-four in the second, show an average proportion, the total in 2,000 being 81. But if we are to regard eighty-one as

representing single instances of a family infection, and these not more than a fourth of the whole of the individuals attacked, the total number of instances of scabies would mount up to more than three hundred, and the disease itself come next in importance, as respects frequency, to eczema. In our previous analysis of cases we referred to the prevalence of the disease after the return of the army from the Crimea, and we explain that occurrence by the almost constant presence of the *acarus* in ships. We have had occasion to note the disease among our ships of war, and it is still more frequent, and probably universal, amongst our passenger vessels. The duration of the disease in the present 44 cases was under one month in 13; from one to three months in 16; from three to six months in 8; from six months to one year in 4; while in 3 instances the annoyance had been permitted to run on for a year. The forms of the affection were, scabies papularis in 35; scabies erythematosa, 3; scabies vesicularis, 3; and scabies pustulosa, 3. The *acarus* was found on the penis in several instances; on the borders of the axillæ also in a few examples; but always in the creases of the hands and wrists and between the fingers. Two cases were complicated with eczema.

ERYTHEMATOUS AFFECTIONS.—The group of erythematous affections is represented by erythema numbering 19 cases; erysipelas, 1; urticaria, 12; and roseola, 3; making a total of 35 in the present thousand, that of the former thousand amounting to 23 only, and the total of the 2,000 being 58.

ERYTHEMA is very considerably more frequent in the female than in the male; it is most frequent in the early period of adult life, namely, from 10 to 30, and lasts a few weeks or months, and sometimes four or five years. Its most common predisposing cause is assimilative debility; then follow nutritive debility, local debility, and nervous debility, and it is much more frequently met with in the face than elsewhere. In the cases before us the greater number presented the diffused type of the eruption; erythema circinatum occurred only once, and erythema tuberosum once.

The figures representing the characters of erythema are, in respect of sex, 3 males in the first thousand, and 14 females, making a total of 17; in the second thousand there were also 3 males, but 16 females, and a total of 19; the total in two thousand being 36. As to the age at which the disease most commonly appears, the range extended from nine to sixty-four; under ten years there was only 1; between ten years and twenty, 4; between twenty and thirty, 7; between thirty and forty, 2; between forty and fifty, 1; between fifty and sixty, 3; and at the age of sixty-four, 1. The duration of the eruption

at the time of application for treatment was, under one month, 2; between one and three months, 1; between three months and six months, 7; between six months and one year, 4; between one and five years, 4; and at seven years, 1. The predisposing cause in the two thousand was assimilative debility in 23 cases; nutritive debility in 9 cases; nervous debility in 2 cases; and local debility in 3.

ERYSIPELAS was present in two cases only in the two thousand. In the present thousand the patient was a gentleman, 58 years of age. The attack was one of erysipelas erraticum, beginning behind the right ear, travelling round the neck to the left side, thence along the forehead to the nose, and ending on the right cheek. The patient had had several attacks of a similar kind, sometimes in the spring and sometimes in the autumn, and on the present occasion the cause was assimilative, beginning in a fatiguing day and unusually late dinner, this succeeded by vomiting and diarrhœa, and followed by a chill from a draught of air impinging on the right side of the neck in a railway journey.

URTICARIA, like erythema, is more frequently met with in the sensitive temperament of the female than in the male. The disorder, excepting in the instance of urticaria ab ingestis, is more common in the adult than in children; it is chronic in its nature, lasting for years more frequently than months, and resulting in general from assimilative disorder and debility.

The number of instances of urticaria in two thousand cases was 16: 6 males and 10 females. Of the second thousand one only occurred under twenty years of age, 3 between twenty and thirty, 2 between thirty and forty, 3 between forty and fifty, 2 between fifty and sixty, and 1 at the age of sixty-four, the extremes of age being 16 and 64. The duration of the disorder had been in one instance sixteen years; in two cases, seven years; in one, four years; in four, two years; in three, between one year and six months; and in one, under six months. Eleven cases were referrible to assimilative debility, and one to nervous debility, the latter example occurring at the fifth month of pregnancy. One case was the result of physical fatigue, one was associated with hay asthma, and another with eczema.

ROSEOLA occurred in only three instances in the second thousand cases, and in four in the two thousand. The three cases were males, ranging in age from ten years to forty-five; and the cause of the eruption zymotic; two formed part of an epidemic of rubeola notha; and one was preceded by headache, suffusion of conjunctiva and tingling of the skin. These

symptoms being relieved by the outburst of the eruption. One was an example of roseola annulata.

PHLYCTÆNOID AFFECTIONS.—The phlyctænoid or bullous eruptions are Herpes and Pemphigus, the former occurring twenty-four times in the two thousand cases, the latter only twice. There would seem to be no reason for any difference in the proportion of the sexes; nevertheless, of the twenty-four examples of herpes, fourteen were males and nine females. The eruption is one of adult and middle life; hence we find the ages ranging between twenty and eighty-two, the greater number of cases occurring between twenty and forty years. The chief bulk of the cases is made up of herpes zoster and herpes præputialis; hence the duration of the disease is limited to days; two cases of herpes universalis, the one dispersus and the other circinatus, lasted for six and eight months; and herpes præputialis, although possessing a separate existence of a week or even less, may by successive recurrence be prolonged, as in one of the instances before us, for several years. The causes in operation in the production of herpes are chiefly local, nineteen in number, three being assimilative and one nervous. Of the forms, three only were general, two being examples of herpes dispersus and one of herpes circinatus; and the remainder local: eight being situated on the trunk of the body; six on the penis; four on the face, head, and neck; and two on the limbs. The case of pemphigus was exhibited by a lad, ten years of age; the eruption had existed for six weeks, during which period his food had been bad, and he had undergone a lengthened sea voyage.

FURUNCULAR AFFECTIONS.—The family of furunculi is represented in our present inquiry by Ecthyma, Furunculus, and Hordeolum; ecthyma contributing six cases in the two thousand; furunculus twenty-five; and hordeolum only one; making a total of thirty-two.

ECTHYMA.—The cases of ecthyma were pretty equally distributed between the sexes; they occurred at every age, from two years to seventy; lasted for a considerable time, in one instance for five years; and were attributable in three instances to assimilative debility; in two, to nutritive debility; in one, to nervous; and in the remaining one, to local debility; the latter being the sequela of scabies. In one case the eruption occupied the scalp, ecthyma capitis.

FURUNCULUS, like ecthyma, is irrespective of sex, although the cases before us exhibit a preponderance of males, fifteen being of that sex, with ten females, making a total of twenty-five in the two thousand. Furunculosis is tedious, ten cases lasting between one year and five, and one twenty years, while

the majority, fourteen, had had an existence of several months. The greater number, namely, fifteen, owe their origin to assimilative debility; eight to nutritive debility; and two to nervous debility. Favourite localities of the eruption were the face, head, neck, and nose; and in one instance the boils had appeared every summer for several successive years. The case of hordeolum belongs to the first thousand.

NERVOUS AFFECTIONS.—The disorders characterized by itching unaccompanied by a commensurate morbid lesion of the skin, a condition referrible to an altered state of innervation of the cutaneous organ, are two in number, Pruritus and Prurigo; pruritus being represented by 14, and prurigo by 13; the total in the two thousand being 27.

PRURITUS would seem to be pretty equally distributed between the two sexes; more frequent in the adult and elderly persons than in the young; of tedious duration, and referrible generally to assimilative debility. In the present thousand cases there occur five examples of pruritus in persons whose ages respectively were 38, 45, 46, 60, and 78. In two instances the disorder lasted three months and six months; in the remaining three, two years, and ten years. Two were examples of pruritus scroti; and one was associated with the eczematous diathesis.

PRURIGO, in the nine cases contained in the present thousand, numbers seven females and only two males; the ages, with the exception of an infant of a year old, and three adults of 40, 44, and 60, were all above 70; one being 80 years of age. The disease had lasted for a period of two to twelve months, and in one instance for seven years. Three of the cases were referrible to nervous debility; six being examples of assimilative debility. A remote predisposing cause in several of the latter cases was the neuralgic, rheumatic, and gouty diathesis.

VASCULAR AFFECTIONS.—NÆVUS was present in two instances only in the present thousand, in six instances in the former, making eight examples in two thousand. With one exception all the cases were female, and the examples in the present instance, a small nævus arteriosus on the nose of a young lady of fifteen, whose face was otherwise covered with lentigines; and a number of nævi aranei on the hands of a girl of ten, a rare occurrence. Both were examples of accidental nævi as opposed to congenital nævi.

HÆMIC AFFECTIONS.—PORPHYRA, or purpura, was absent from the present thousand cases, but present in two instances in the former one, making the total two only in two thousand cases.

DEVELOPMENTAL AND NUTRITIVE AFFECTIONS.

—Defective development and nutrition of the skin is illustrated by Xeroderma, or epidermal ichthyodes, and defective nutrition by cacotrophia cutis.

XERODERMA presents eleven examples in the present thousand cases, and six in the former one, making a total of seventeen for the two thousand. The ages of the persons ranged from one year and a quarter to thirty-four. All were congenital with the exception of one; hence in every case the disease had been in existence during the whole life of the individual and was referrible as its predisposing cause to nutritive debility. The exception was a woman of thirty-two, in whom the disease was accidental or acquired, and had lasted for three years. Four of the cases were children of the same family, ranging in age from one year and three months to eight years, the hands being principally affected. One case presented the common complication of asthma; and one was tormented with pityriasis capitis.

CACOTROPHIA CUTIS, or want of healthy nutrition of the skin, is shown in five cases out of the two thousand. The skin, particularly of the face, is discoloured, sordid, and often dry and coriaceous. The subjects of this morbid state were all females, ranging in age from nine to twenty-five; and the morbid condition had lasted for one or two years; in some instances depending upon assimilative, in others upon nutritive debility. The remote predisposing cause in two instances was uterine disorder, in two others the cause was nervous irritability and weak vital power.

HYPERTROPHIC AFFECTIONS.—Hypertrophy of the integument introduces to us the family of the Moles and Warts, the thickened tumour of Cheloides and the more diffused enlargement of Spargosis. The total of these diseases in the two thousand cases is only seventeen, of which seven were instances of cheloides; four of myrmekia or verruca; three of nævus hypertrophicus; two of acrochordon or pedunculate wart; and one of spargosis or elephantiasis Arabum.

ACROCHORDON.—Nævus hypertrophicus is absent from the present thousand cases, and its place is taken by acrochordon. Acrochordon is a common affection in the adult and beyond adult life, and is usually met with on the neck and trunk, as in the two instances before us; but is less frequently considered of sufficient importance to be brought under the attention of the medical man. The same may be said of nævus hypertrophicus, hence the absence of the latter disorder; and the small number of cases of acrochordon, in these tables, cannot be taken as a proof of their comparative rarity. The

predisposing cause of acrochordon is a local nutritive debility of the skin.

MYRMEKIA, or verruca, was present, in the instances before us, in the digitated form, on the scalp; as a closely sprinkled crop of verrucæ minimæ sessiles on the forehead; and as a confluent triangular or kite-shaped cluster on the neck. Two of the subjects were females, aged respectively 12 and 32; the other was a youth of 18. The warts had been in existence for the periods of six months, one year, and two years. They were the consequence of local nutritive debility, with more or less of general debility; and, in the case of the adult, were associated with alopekia, a sequela of fever.

CHELOIDES, or cheloid tumour, occurs only twice in the present thousand cases, as against five times in the previous thousand. The former cases were idiopathic in three instances, and traumatic in two: the present are both traumatic; one arising from a cicatrix left by a surgical operation for the removal of a nævus hypertrophicus on the face, the other from the cicatrix of a strumous abscess: one case was that of a female aged 37, the tumour having been three months in existence; the other was that of a boy of three years, the tumour having existed one year. Both were instances of local nutritive debility united with general nutritive debility. The example of spargosis belongs to the first thousand; it was a case of spargosis cruralis, or boucnemia, the elephantiasis Arabum, and originated in the climate of China.

ATROPHIC AFFECTION of the skin is a rare disease, and occurs only once in the two thousand cases. The case before us exhibited a state of general atrophy and contraction of the skin of the entire body, more striking on parts, as upon the face, than upon the general surface. The patient was a nervous and anæmic female, aged twenty-five, and the disease of the skin had been present for seven years. She also suffered from uterine irritation and leucorrhœa.

ALPHOUS AFFECTION.—Alphos, the lepra vulgaris of Willan, and lepra alphos of the Greeks, is one of our commonest diseases, coming third in order after eczema, the intervening affections being gutta rosacea and madesis, or loss of hair. In our 2,000 cases of every form of disease, Alphos occurs 143 times, and is pretty equally distributed between the sexes: in the first thousand the excess was in favour of females; in the present, in favour of males, the resulting figures in the 2,000 being 78 males and 65 females. The age at which patients are affected with the disease ranges from three years to extreme old age; the *age of inception* of the disease being as follows:—under ten years, 17; between ten

and twenty, 47; between twenty and thirty, 43; between thirty and forty, 15; between forty and fifty, 12; between fifty and sixty, 8; and at sixty-three, 1. The active period of development of the disease may, therefore, be stated to be, ten to thirty years, within which limit of time the numbers are 90; or nearly three-fourths of the whole. The chronic nature of the disease is exemplified by its *duration*; two cases had existed for 57 and 51 years respectively; three cases had lasted between 50 and 40 years; six, between 40 and 30 years; thirteen, between 30 and 20; forty-three, between 20 and 10; nineteen, between 10 and 5; while the remaining fifty-seven cases were of more recent origin. The forms assumed by the eruption were chiefly the circinate and diffused; *alphos guttatus* occurred twice; *alphos capitis* was strongly marked in fourteen instances; *alphos faciei* in four; *alphos manuum* in three; and *alphos pudendi* in two. In nine cases the eruption possessing the diffused character was the seat of eczematous inflammation and exudation.

In respect of the *cause* of *alphos* we may repeat the words of our previous inquiry; "the disease originates in a *diathesis*; but the source of that diathesis is at present unknown; and the more closely we investigate, the greater difficulty do we find in coming to any conclusion with regard to it." It was hereditary in nearly one-third of the cases, namely, in 44 out of the total 143. The predisposing causes were generally such as would produce a depression of the vital powers; for example, the gouty and consumptive diathesis; the development, retardation or disturbance of menstruation; pregnancy and parturition; lactation; variation of seasons; and continued and eruptive fevers. Extremes of heat and cold, with excess in diet, appeared among the exciting causes. In one case the eruption made its appearance for the first time during a wedding tour; another case was cured by an attack of measles; in a family of five, three dark and two fair in complexion, the latter suffered while the former escaped; and one case was complicated with *myrmekiasmus* and *osmidrosis*.

STRUMOUS AFFECTIONS.—Eighteen cases of disease, in the present thousand, come under the denomination of strumous disorders, and thirty-six in the preceding thousand, making a total of 53. The forms of the disease are *lupus* and *strumoderma*, the former numbering 40; namely, *lupus exedens*, 7; *lupus non exedens*, 19; and *lupus erythematosus*, 14; and the latter, or *strumoderma*, 13.

LUPUS EXEDENS was more common in the female than in the male in the proportion of six to one. The age at which it first appeared ranged between twelve years and eighteen years.

Six out of the seven cases occurred between the ages of ten and thirty; and the duration of the disease at the time of registration was between ten and twenty years in four instances; and between twenty and thirty years in two.

LUPUS NON EXEDENS was more frequent than lupus exedens, occurred at an earlier age, and was wider in its range, extending from three months to fifty years. In the total of 19, the males amounted to 6, the females to 13. The most prolific period for the appearance of the disease extended from early infancy to the twentieth year: there were 7 cases under the age of five years; 2 between five and ten; 7 between ten and twenty; and 3 between twenty and fifty. The duration of the disease is shown by the persistence of 3 cases for a period ranging between thirty and forty years; 4 cases had existed between twenty and thirty years; 5 between ten and twenty years; 1 between five and ten years; and 6 less than five years.

LUPUS ERYTHEMATOSUS attacks its victims at a later age than either of the preceding; the extreme range of age is spread out between seventeen and seventy-one years. None occurred before seventeen; between seventeen and twenty there were 4; between twenty and thirty, 14; between thirty and forty, 3; between forty and fifty, 2; and one at the age of seventy-one. In 6 the disease had existed between five and ten years; in 8, under five years; four were males, and ten females.

STRUMODERMA was present in 13 cases, of which 5 were males and 8 females. Its range of attack extended from infancy to thirty years; under five years there were four cases; between five and ten years, 4; between ten and twenty, 3; between twenty and thirty, 2. In two instances the disease had been in existence between twenty and thirty years; in 2, between ten and twenty years; while 9 fell short of five years.

CARCINOMATOUS AFFECTIONS.—Cancer of the skin very commonly assumes the form of Epithelioma; in 2,000 cases of cutaneous affections there occur 11 instances of Epithelioma, all affecting the face, 7 being situated on the cheek and 4 on the nose. Six of the subjects were male and five female; the age of beginning of the disease ranged between thirty-five and sixty-one; 2 cases occurring between the ages of thirty and forty; 1, between forty and fifty; 6, between fifty and sixty; and 2, at sixty and sixty-one respectively. The disease had existed for twelve and fourteen years in two instances; between five and ten years in 3; between two and five years in 5; and under two years in 1. The seat of the affection was the face and cheek in 7; the nose in 4 cases.

ZYMOTIC AFFECTIONS, for reasons already given, occur

among the chronic disorders only seldom; in our present total they amount to four only; 3 rubeola, and 1 varicella.

SYPHILITIC AFFECTIONS.—The syphilodermata amount in the total two thousand to 70 cases; of which 30 were included in the first thousand and 40 in the second. The males greatly preponderate over the females, the former being 56, and the latter 14 in number. The age of inception of the disease ranges between twenty-one and sixty, one patient being attacked at seventy-two. Between the ages of twenty and thirty the number of cases was 26; between thirty and forty, 25; between forty and fifty, 10; between fifty and sixty, 7; with 1 at sixty, and 1 at seventy-two. The duration of the disease was prolonged in one instance to twenty-five years; in three, to twenty years; between ten years and twenty there were 5 cases; between five years and ten, 8; between one year and five, 22; and 31 under 1 year. The forms of the disease in their order of frequency were as follows:—syphiloderma tuberculosum, 23; ulcerosum, 16; squamosum, 14; erythematosum, 13; and papulosum, 4.

LEPROUS AFFECTIONS.—The representatives of this group are elephantiasis Græcorum, and morphæa; the two thousand cases offer only three examples of these diseases, two of the former and one of the latter. The single case of elephantiasis Græcorum occurring in the second thousand, presented the mixed tubercular and anæsthetic form; the patient was a lad of fourteen, born in the Mauritius, and afflicted with this terrible disease since the age of nine; his debility and exhaustion were extreme.

PIGMENTARY AFFECTIONS.—Examples of these diseases were divided between melasma, leucasmus, and phakosis or lentigo; the first numbering 14; the second, 8; and the third, 2; the total in the two thousand being 24.

MELASMA is more common in the female than in the male; the proportions of the two in the present total being 13 of the former, and 1 only of the latter. The age of inception ranges between twenty and forty-three; 8 of the cases being between twenty and thirty; 4 between thirty and forty; and 2 between forty and forty-three. The term of duration of the affection at the time of registration was seventeen years in 1; between five and ten years in 5; and between two years and five years in 8. The disease occurred upon the face eleven times, and on the body and limbs thrice.

LEUCASMUS is equally distributed between male and female; the age of inception of the disease ranges between 15 and 54; 3 cases occurring between fifteen and twenty years; 2 between twenty and thirty, 2 between thirty and forty, and

1 at fifty-four. The duration of the affection extended from one year to twenty-seven; five cases having been in existence less than five years; one, six years; one, sixteen; and one twenty-seven years. All the cases were associated with melasma.

PHAKOSIS, or freckled skin, appears only twice in the two thousand cases; in a boy of ten, who had commenced to freckle at the age of seven, and in a man of twenty-six, in whom the freckles had made their appearance at the age of six; both were strongly-marked examples of the affection, and occasioned considerable deformity.

PHYTODERMIC AFFECTIONS.—The diseases exhibiting a plant-like or phytiform degeneration of the epidermic and trichous tissues of the skin are, phytosis versicolor, numbering 30 examples; tinea, or phytosis tonsurans and annulata, 60; and favus, or phytosis favosa, 1; making together a total of 91 in the two thousand cases.

PHYTOSIS VERSICOLOR, the pityriasis versicolor of Willan, is more common in the male than in the female, in the proportion of 17 to 13, making a total of 30 in the two thousand. The *period of life* at which it makes its appearance ranges between fifteen years and fifty-five, but it is most frequent between twenty and thirty. Between fifteen and twenty years there occurred 5 cases; between twenty and thirty, 18; between thirty and forty, 3; between forty and fifty, 3; and at the age of fifty-five, 1. Its *duration* is chronic, being prolonged in some instances to ten and twenty years; between five and ten years the number of cases was 10; between one year and five, 14; the remaining four were of more recent origin. The forms presented by the disorder were:—pigmentous, 25; pruriginous, 4; squamous, 1. There existed no ground for suspicion of contagion.

PHYTOSIS TONSURANS and ANNULATA or tinea, was present 60 times in the two thousand cases; the tonsurant variety 44 times, including five cases of phytosis pityriasisica; the annulate variety 16 times. The males were more frequent than the females, the former numbering 37, the latter 23. The *age* of origin of the disease ranges between three months and twelve years, for the tonsurant form; and extends onwards for the annulate form to twenty-six and forty-six years; the most prolific period of origin of phytosis tonsurans, or common ringworm, being between five and ten years; between three months and one year there were only 2 cases; between one year and five, 12; between five years and ten, 27; between ten years and fifteen, 15; and above this 4 annulate forms at the ages of sixteen, nineteen, twenty-six, and forty-six. The

chronic character of the disease is shown to be less considerable than is usually believed; one case was of four years' standing, one of two years; between one and two years there were 5 cases; between six months and one year, 8; between three months and six months, 17; and under three months, 28.

FAVUS, or phytosis favosa, a rare affection in England, and especially so among the better class, occurs only once in the two thousand cases; the subject being a young man of seventeen, a native of Mogador, sent to this country for his education.

UNGUAL AFFECTIONS are represented by only four examples; three cases of scabrities unguium, and one of suppuration of the vallecule unguis; they were equally divided between the sexes, were developed in adult life between thirty-eight and fifty, and had lasted,—the cases of scabrities two years; and that of suppuration vallecule two months.

AFFECTIONS OF THE HAIR SYSTEM—were present in 228 cases; namely, madesis, or loss of hair, 177; trichosis, or excess of hair, 7; poliosis, or blanching of the hair, 9; kerion, or suppuration of the follicles, 9; and sycosis, or disease of the follicles of the beard, 26.

MADESIS comprehends in its 177 examples, alopekia, including trichorrhœa; area or alopekia areata; and phalakrosis or calvities. The cases of *alopekia* amounted to 111; 40 being males, and 71 females. The range of age during which the affection prevailed extended from fourteen years (three cases) to forty; only three examples above the latter age being on the register; between fourteen years and twenty the numbers were 23; between twenty and thirty, 69; between thirty and forty, 16; and above forty, namely, forty-three, forty-six, and forty-eight, 3. In 15 cases, the loss of hair had continued more than ten years; in 15 cases between five and ten years; in 65 cases between one year and five; while under a year there were 16 cases. The cases of *alopekia areata*, the *area Celsi*, were fifty-seven in number; of which 21 were males and 36 females. The disease made its appearance in 11 between the ages of five and ten; in 8 between ten and fifteen; in 7 between fifteen and twenty; in 13 between twenty and thirty; in 17 between thirty and forty; and in one instance at forty-seven. Two cases had lasted for the respective periods of nineteen and fifteen years; 3 between ten and fifteen years; 6 between five and ten years; 18 between one year and five; and 28 for a shorter period than one year. *Phalakrosis* or calvities, occurred in 9 cases; 5 males and 2 females; 2 of the patients were aged three and four; 2, ten and seventeen; 3, twenty-two to twenty-nine; and 2, thirty-

one. Baldness had existed for ten years, nine years, six years, and four years, in 4 cases respectively; for two years in 3; and one year in 2. In several of the cases baldness was universal over the whole body.

TRICHOSIS, or hirsuties, was exemplified in seven instances; the subjects were all females, and with one exception, in which there prevailed an universal state of hairiness, the abnormal growth was limited to the face only, or to the face, chest, and limbs. The age of inception of the disordered function ranged between seven and forty-one years; 4 of the cases were under twenty; 2, between twenty and thirty; and 1, forty-one. At the time of registration the morbid state had existed for a period of two to nine years.

POLIOSIS, or canities, was present in 9 cases in the two thousand; 2 males and 7 females. The age of origin of the morbid change ranged between fifteen and forty years; 3 of the subjects were fifteen; 2 between twenty and thirty; and the remaining 4 between thirty and forty, inclusive. The white hairs were pretty uniformly dispersed through the rest of the hair, giving rise to incipient greyness.

KERION, or suppurative inflammation of the follicles of the scalp, occurs 9 times in the two thousand, 4 of the cases being male, and 5 female. The disease is an affection of childhood, ranging in inception between five years and eleven; the greater number (6) occurring between five and ten years. Its duration is ordinarily measured by months; one case had been protracted to two years; all the remainder fell under six months. The most frequent form of the disease was kerion confertum; kerion dispersum was present in four instances; and three of the cases were complicated with phytosis tonsurans, or with phytosis annulata.

SYCOSIS is represented by twenty-six examples in the two thousand cases; all were males; the age of origin of the disease ranged between sixteen and sixty-two, the most prolific period being between thirty and forty. Between sixteen and twenty years there occurred 3 cases; between twenty and thirty years, 4; between thirty and forty, 14; between forty and fifty, 4; and at the age of sixty-two, 1. Four had existed between ten and fifteen years; 4 between five and ten years; 16 between one year and five; and 2 for a less period than one year. The greater number of the cases were of the papulous and pustular kind.

SEBIPAROUS AFFECTIONS.—The diseases of the sebiparous organs falling under the present head, are:—congestio folliculorum, steorrhœa, asteatodes, comedones, malacosis seu molluscum, tumores encystici, and acne.

CONGESTIO FOLLICULORUM occurred on the face in a married lady, aged eighteen, and had been in existence at the time of registration for two years.

STEARRHŒA was present in three instances; in an infant six months old, in a young lady of twenty-two, and in a woman of thirty-seven; on the first and the last it occurred upon the scalp, in the young lady on the cheeks just below the lower eyelids, where it formed numerous concretions. It had been nine months in existence on the infant, and was accompanied with superficial abscesses; on the women it had continued for three years each; the affection of the scalp was accompanied with alopekia.

ASTEATODES, or narcosis folliculorum, was present in a single instance; it occupied the scalp of a gentleman, aged thirty-two, and had existed for five years.

COMEDONES were present on the nose in an unusual degree in a lady aged twenty-five, and had existed for six months. She was suffering under uterine disease, with sympathetic excitation of the heart's action.

MALACOSIS, or molluscum sebaceum, presented two examples in the first thousand, but was absent in the second.

TUMORES ENCYSTICI were represented by three instances, two of the scalp and one of the eyelid, the former containing altered sebaceous substance, the latter a serous fluid.

ACNE, one of the common affections of the skin, usually of the face, the back, and the breast, numbers a total of 79 in the two thousand: 55 in the first thousand, and 24 in the second. The females affected by the disease are more numerous than the males in the proportion of 43 to 36, and all the females were unmarried with the exception of two, whose ages were twenty-five and twenty-seven respectively. The age of inception of the disease ranges between ten years and thirty-seven; 19 cases occurring between ten and fifteen; 40, between fifteen and twenty; 17, between twenty and thirty; and 3, between thirty and thirty-seven. Acne is essentially a disorder of puberty, hence the greatest number of instances happen at the age of fifteen, namely 13, while, between fifteen and seventeen inclusive the number is 40, that is, more than half of the whole. The duration of the disorder may be stated to be seven years; 9 cases had existed between ten and fifteen years; 20, between five and ten years; 43, between one and five years; while 7 only fell under the year. From these data we may deduce that acne is a disease occurring at the age of fifteen, is more common in females than in males, and runs a course of seven years.

SUDORIPAROUS AFFECTIONS are represented in the

present inquiry by EPIDROSIS, or excess of perspiration. The three subjects of the disorder were all males, aged respectively at the period of commencement of the morbid function, nine, nineteen, and thirty-one years. The duration of the disease measured at the time of registration was two years, five years, and fifteen years. In one the hands alone were affected, in another the soles of the feet only, and in the third both hands and feet. The complaint was hereditary in one case, due to nutritive debility in another, and to nervous debility in the third.

TRAUMATIC AFFECTIONS.—Disorder of the skin resulting from external irritants, is illustrated by an example, rare among the middle classes, of *Phtheiriasis*, occasioned by the presence of the pediculus corporis. The patient was a lady, aged 72, but otherwise strong and in good health.

ON THE CORRELATION OF CUTANEOUS EXANTHEMA WITH NEURALGIA. BY EDWARD WOAKES, M.D., Lond., F.L.S. Luton.

THIS subject has of late attracted a large share of attention both at home and on the continent of America. It is one of extreme interest, as well for the difficulties that have hitherto beset its study, as for the important relations which the pathology of this particular branch bears to the whole subject of neuralgia, and indeed to a great number of other diseases. Neuralgia presents so few opportunities for the actual observation of its morbid anatomy, that the phenomena about to be reviewed, which demonstrate themselves under our eyes as it were, acquire an additional value from this cause, and cannot therefore be too keenly appreciated.

A brief glance over the field of neuralgic affinities will display much unworked ground, but the scope of this paper will necessarily limit our remarks to that part of the subject which comprises the mutual affinities of neuralgia and various lesions of the skin. The cases exhibiting this relationship group themselves into two divisions, the idiopathic and traumatic.

By far the greater number of examples occur under the former of these, Herpes zoster being the commonest, and therefore perhaps of greatest interest to the physician. Another and more strange class is presented in those cases of injury to nerve trunks, accompanied by radical change in the texture of the skin covering the distribution of the nerve or nerves

affected. In these patients an erythematous, papular, or herpetic eruption appears on the integument involved, which soon loses its hair and becomes thin and glossy, while characteristic variations are seen in the joints and nails of the limb. As far as we have been able to ascertain, our distinguished associate, Mr. Paget, was the first to call attention to this latter group of the disease in a lecture published in the *Medical Times and Gazette* for March 26, 1864, and the subject has since been remarkably illustrated by Drs. Mitchell, Moorhouse, and Keen, of the United States army, who have recently published an admirable *résumé* of the ample experience of wounded nerves gained by them during the late war in the military hospitals of America.

We propose briefly to recapitulate all the recorded cases we have been able to find of the direct result of nerve injury associated with skin symptoms, for the phenomena they exhibit being similar in kind and differing only in degree from those of a purely idiopathic character, the consideration of the former will materially aid in forming a just estimate of the latter.

Seven cases recorded by Dr. Mitchell and his colleagues are the first requiring notice. As these closely resemble each other in their main features, we will quote at length one only, which may be regarded as a good representative of the whole. It is No. 18 of the work referred to.

David Schwely, æt. 17—shot in the neck at Gettysburg, *wounding the axillary nerves of right side*. Burning pain began on the tenth day in palm and fingers of right hand. (This burning pain is an almost constant accompaniment of injury to a nerve.) Sensation in the limb was but little impaired. The joints became swollen and contracted. About a year and a half after receiving the wound the entire arm was shrunken, many muscles being represented by the merest trace, and from their contracted state the wrist was partially dislocated. On the back of the hand, from the knuckles to the finger-tips, the skin is tense, shining, hairless, mottled red and blue, abraded in spots; nails curved as in consumptive patients; joints swollen, tender; the whole palmar face of the hand and fingers is polished, deep scarlet, and remarkably eczematous. The eruption followed the burning in about six weeks; the palm of the left hand is almost equally eczematous, and began to be so nearly a month before the wounded side.

Case 19 is less marked. It records a *gun-shot wound of left brachial plexus*, with paralysis of motion, atrophy and contraction of numerous muscles; finger joints swollen and stiff.

Case 20 affords a striking parallel to one to be presently stated of an idiopathic origin. There was a gunshot wound of both legs, with *injury of left sciatic nerve*. Paralysis of flexors

of foot, intense burning, ulcers about nails, congestion and eczema, but no thinning of the skin.

Case 21.—*Gunshot wound of sciatic nerve*.—Partial paralysis of motion and sensation, burning pain, successive crops of eczema about every two weeks as high as knee, with relief to burning pain.

Case 22.—*Gunshot wound of brachial nerve*.—Slight loss of motion and sensation, early burning pain, diseased joints, no eczema, but remarkably acid sweats. These disappeared during the electrization of the arm.

Cases 24 and 25 are similar, but do not require special detail.

The next cases are abridged from Mr. Paget's lecture in the *Medical Times and Gazette* above referred to. An epileptic patient consulted Mr. Paget a few years ago concerning the effect of an injury inflicted upon him by the tight application of a cord round the wrists and arms during an epileptic seizure. The immediate effect of this was to cause a dropping of the hands, like those of a patient with lead palsy. They then became œdematous and very painful. On the subsidence of this condition, the muscles of the forearm and hand were wasted, especially those of the ball of the thumb and little finger. The skin of the fingers afterwards became smooth and glossy, and the palmar cuticle peeled. It is not stated whether any rash existed. Recovery was gradual. Another case from the same lecture is similar:—A lady fell with her hands tied behind her, and in doing so forcibly withdrew one hand from the silk handkerchief which confined them, in order to save herself. This was followed by weakness and stiffness of the hand, and numbness in the course of the distribution of the median nerve. After four or five weeks the back of the hand and fingers became hot, red, and glistening. The loss of power and defect of sensation in these cases left no doubt in Mr. Paget's mind of severe injury to the nerves of the forearm. The following instance of an analogous state of things occurred in our own practice:—Some time in 1864, a child, aged twelve years, ran a thorn into the wrist on its anterior aspect a few months before applying for relief. The site of the puncture was exactly over the *median nerve*. Since the accident the inner side of the arm, from the elbow downward had been numb, and a papular rash had existed in this locality during the greater part of the time. This completes the detail of all the cases illustrative of the traumatic form of the disease we have been able to discover. Before passing to the other variety it will be well to state that all the authors quoted agree that the phenomena in question are most marked where the nerve is partially injured only and not completely destroyed.

Shingles being, as we have stated, the typical form in which the association of neuralgia and skin rash occurs in its idiopathic aspect, we will briefly quote an instance of this kind, the counterpart of which will be familiar to every physician:—

Anne Smith, a married woman æt. 47, who had ceased to menstruate, was seen Oct. 22, 1866. She then had a bilateral crop of shingles developing below the mammæ and on the back: with it were associated loss of appetite, sleepless nights, and high-coloured urine; no pain. Ordered Liq. Potass. ℞. ter die.

Oct. 24.—Pain began to be felt in the line of the rash, of a decidedly neuralgic character; it catches her breath.—Oct. 29. No better.—Nov. 2. Pain on left side, where the rash was most copious; very acute. A great tendency to faint. Ordered Ammon. Sesquicarb. gr. v., et Aq., ʒj, 4^{tis} horis; also, Ferri Sesquioxidi, ʒij, 4^{tis} horis.—Nov. 5, Eruption subsiding. Neuralgic pain relieved a good deal, but very severe at night.—Nov. 7. Neuralgia worse on left side. Ordered Ammon. Hydrochlor. gr. x., Ferri Sesquioxidi, ʒj, 4^{tis} horis; also, Ext. Belladon., gr. $\frac{1}{4}$; 4^{tis} horis.—Nov. 9.—Gets more relief from that than from any previous medicine. Pain is still bad, and she cannot lie down.—Nov. 14. Much better; sleeps well; pain gets less every day. Made rapid recovery. Alleviation most marked since addition of muriate of ammonia.

Were it necessary, such cases might be multiplied ad infinitum; but wishing simply to illustrate the noteworthy features of this remarkable disorder, we shall now pass to other forms of it.

In the lecture already quoted, Mr. Paget speaks of *two cases of shingles affecting the arm*, in which neuralgia continued after the attack, and with it the fingers exhibited in a well-marked degree the features so often seen after injury of a nerve. That is to say, they became thin and tapering, smooth, hairless, glossy, pink, and blotched, as if with permanent chilblains. These symptoms subsided slowly, being unaffected by the ordinary treatment of neuralgia.

The same author more recently reports in the *British Medical Journal*, Oct. 13, 1866, a case in which an analogous cycle of events occurred; but inasmuch as the nerve affected found its ultimate ramification in a different texture, in bone as well as skin, a further illustration was afforded, by varying the experiment, of the direction in which the morbid processes point. Very briefly abstracted, it is as follows:—A gentleman, after exposure to cold, had *neuralgia in right side of face*. In three days an herpetic eruption set in, which coincided with the surface distribution of the infraorbital, anterior dental, and anterior palatine branches of the right superior maxillary nerve. The eruption extended to the right half of the roof of the

mouth and adjacent part of gum and cheek. Subsequently necrosis of the alveolar border of the jaw occurred, the teeth of which fell out, and ultimately the bone itself came away. Complete recovery followed, but well-marked pitted scars, unlike the herpes of shingles, remained on the site of the eruption.

A case of *herpes of the glans* is reported in the same paper as occurring in a gentleman after every sexual intercourse with his wife: the result, says Mr. Paget, of an excited unsound nerve force.

An instance of *herpes of brachial plexus* is reported by Broadbent in the *British Medical Journal* for Oct. 27, 1866. A woman, aged 74 years, after suffering with severe burning pain down right side of neck and right arm, and herpetic rash extending from lower cervical vertebræ (corresponding to the distribution of the small posterior branches of the plexus) across the right side of the back of the neck, over the shoulder, and down the outer side of arm to the upper part of forearm on its outer aspect, for a week, lost the use of the arm. The burning pain remarkably resembled that described in the traumatic cases, and the almost general, but incomplete motor paralysis of the limb, still more closely allied it to these. The patient appears not to have benefited by treatment. This case supplies another link in the chain of phenomena; viz., the association in an idiopathic case, of paralysis of motor nerves, pain in sensory nerve, and cutaneous rash. A case of *neuralgia in leg* associated with ulcers (superficial), is reported by Mr. Hooker, in the *Lancet* for 1859, which was successfully treated by division of the popliteal nerve. After the operation the pain disappeared, and the ulcers healed. There is yet another case which we quote from memory, having recently read the detail, but having lost sight of the author who records it. It is to this effect: A patient suffered for many years with neuralgic pain in the leg, complete wasting of the muscles, thinned and shiny skin. Whether any rash existed or not is doubtful. Every treatment was exhausted without effect, when the popliteal nerve was divided, the operation being followed by complete recovery.

If now we reduce the symptoms exhibited by the foregoing cases to a tabular form as under, they will all be seen to possess more or less of a substitutive character. That is to say, there is no single phenomenon peculiar to any special form of the disease, whether idiopathic or traumatic in its origin, so that it may be premised at the outset of our inquiry that the cause of the disease is to be sought for in some unwonted condition of the nerves supplying the affected tissue.

These are not subjective cases, nor are they to be explained by some ill-defined notion of a morbid state of the blood acting on the nerve centres, and reflected to the seat of the disease. Thus, glossy or atrophied skin, a typical feature of an extreme and long-continued degree of interference with the innervation of a limb, such as usually results from a direct wound of the nerve, is also found in company with idiopathic Herpes of the arm. The necrosis of the upper jaw in the case of facial Herpes and neuralgia, receives a parallel in the ulcerous patches of integument (a cutaneous necrosis) occurring with severe neuralgia of the leg. And though an apparent divergence is presented in the character of the rashes described, these are only varieties of the same type, and all own the same pathological cause. In fact, it may be questioned whether the eruption styled eczema, by the American authors, would not have been described as Herpes by an European writer.

IDIOPATHIC.

Herpes Zoster	...	Neuralgia.		
„ Brachialis	...	„	...	Glossy skin.
„ „	...	„	...	Motor palsy.
„ Facialis	...	„	...	Necrosis of jaw.
Ulcer of leg	...	„	...	Cured by division of popliteal nerve.
Eczema of leg	...	„	...	Glossy skin, cured by division of popliteal nerve.

TRAUMATIC.

Wounded median nerve	...	Numbness	...	...	Papular rash.
„ axillary nerve	...	Neuralgia,	Palsy	...	Eczema, glossy skin.
„ sciatic nerve	...	„	„	...	„ ulcers of nails.
„ brachial nerve	...	„	Edema...	„	„ ulcers, glossy skin.

The peculiar appearances which, for the sake of brevity, are classed under the head of "*glossy skin*," and which mark the degenerative era of the affection, possess some very interesting connections. This is seen *e.g.* in the disease termed alopekia areata, which, with its congener morphæa alba atrophica, appears to the writer to present features so closely allied to the skin complications of neuralgia, that their pathological analogy admits of little doubt, whatever difference of opinion may exist respecting the nature of their cause. The likeness will be

recognized by any one who will consult Mr. Erasmus Wilson's elaborate description of these diseases; and it is interesting to note that this intimate resemblance between glossy skin occurring directly from nerve injury and that arising spontaneously in the system, confirms the fact insisted on by Mr. Wilson, that the phenomena of area, at any rate, are due to atrophy of the skin, the result of defective innervation. But the phrase defective innervation requires further elucidation.—Can we get beyond the mere language and understand its mechanism?

In a very suggestive communication to the *British Medical Journal*, Oct. 13, 1866, Mr. Paget, remarking on these cases, says that "it has yet to be decided in what degrees and manners nutrition may be affected by disturbance of nerve force." And again, in the *Medical Times and Gazette* already quoted, alluding to the pathology of the disease, he says: "It is evident that long-continued paralysis of both motion and sensation, attended with rapid wasting, and more or less of neuralgia, may ensue in consequence of such injury to nerve fibres, as *probably falls far short of rupture or destruction of their tissue*, and that these things, in an extreme degree, may be due to an injury which neither in the manner of occurrence, nor in any other attendant character, would seem to have fallen with special severity on the nerve trunks. It would seem as if the *nerve trunks might be rendered long incapable of their functions by such injury as when occurring to the brain or spinal cord, we call concussion.*" Again, in the American work already laid under such liberal contribution, the authors say: "When a nerve is injured, the muscles may be paralysed, sensation destroyed, or nutrition attacked: these triple results will occasionally occur in one and the same case, but in differing degrees, as motor, sensory or nutrient fibres happen to suffer more or less." And in seeking "for the mechanism by which the nutrient nerves act," they further say:—"Whether they are *sympathetic fibres*, as we believe them to be, and whether they produce effects directly on the tissues, or only through their *control over the vessels*, are points which our cases do not aid us to clear up, and for these reasons we decline to discuss them."

Whether the additional light derived from the comparison of the allied class of idiopathic cases will supply the missing links in the pathology of the traumatic ones, and whether from this comparison a true deduction may be gained for the solution of Mr. Paget's query, in what degrees and manners nutrition may be affected by disturbances of nerve force, are

questions towards the solution of which the remainder of this paper will be directed.

The quotations hitherto given are from the only authorities who, as far as we know, have given this subject their consideration, and who agree that the phenomena in question are referable to arrest of nutrition consequent upon some sort of interference with that part of the innervation of the affected skin due to the sympathetic nerves. In order to advance our inquiry a stage nearer to the ultimate anatomical condition of the disease, it will be well to recall the facts of late years pointed out by Ludwig, Bernard, and other physiologists, "that while stimulation of certain cerebro-spinal nerves proceeding to the salivary glands, augments the secretion, *similar excitement of the sympathetic branches checks its flow, and also greatly reduces the current of the blood.* It is thus plain that the nerves operate on the blood-vessels: the cerebro-spinal causing dilatation, whilst the sympathetic has the opposite effect."

Hence it is obvious that when any part of the body—say the skin—is successfully pursuing its organic functions, its blood-vessels, and more especially its capillaries, are in a state of equilibrium between the forces exercised upon them by these two portions of the nervous system. A state of tone is in this way maintained in them, the greater share in accomplishing which is referable to the regulating influence of the sympathetic fibres. By the term "tone," is meant that condition of equilibrium between the capillaries and the tissue-cells surrounding them, which is necessary for the exercise of those eclectic functions by the latter, upon the due performance of which the ultimate processes of nutrition mainly depend.

Now this state of tone may be disturbed through two channels, as the result of an impression, or shock, applied directly to the nervous apparatus of the part: either it may take effect through lesion of the sympathetic fibres themselves, or through that of the corresponding cerebro-spinal nerve associated with them. We do not aver that the phenomena under review never occur as the result of reflex action, though the major part of them seem to admit of solution without reference to that complicated action of the nervous system.

The physiological formula, as thus expressed, is equally applicable to both the traumatic and idiopathic cases already detailed. For it must be remembered that in the former we are concerned with injuries which fall short of the actual division of the nerves involved, and the effect of which on them partakes rather of the nature of what (speaking of other portions of the nervous system), is called shock. It would

appear, moreover, that this state of things is not inconsistent with the transmission of nerve force, though this is of uncertain occurrence: reminding one of the feeble and precarious currents of electricity that are capable of being conveyed through a damaged, but still continuous telegraphic cable.

It will aid the application of these physiological principles to the symptoms we are attempting to explain, briefly to recapitulate the phenomena induced by the lesion of a nerve from an external and recognisable cause. The American writers, whose gunshot cases were so well calculated to illustrate these from the frequency with which "commotion" of tissues not actually involved in a wound, takes place in injuries from bullets, describe the following appearances:—An eczematous eruption, showing itself as minute vesicles, remaining for some time, or occurring in successive crops of larger ones, varying in quantity, sometimes disappearing for a time, and then returning. The skin on which this eruption takes place is deep red or mottled, or red and pale in patches, and the surface becomes glossy and shining, suggesting to all observers the idea of a chilblain. As the time over which the case extends lengthens, the subcutaneous tissue becomes shrunken, the glossy appearance increases, and the attenuated integument looks as though it were tightly stretched over the adjoining parts.

Undoubtedly, then, the most important occurrence in the traumatic cases, usually the only one in the idiopathic as far as the skin is concerned, is the *vesicular eruption*.

How is this phenomenon to be explained? It will be remembered that we are not dealing with such simple impressions upon the nerve-trunks as would excite their wonted action, but rather with a shock, the effect of which is to paralyse, for the time, all function in the nerve so affected. The consequences, then, of such a shock acting directly on the sympathetic fibres will be that their function—"that of reducing the current of the blood in the capillaries"—will, for the time, be totally abnegated, and they will become distended with blood. One effect of this will manifest itself in the papillæ of the skin. Owing to the loss of tone thus engendered in the capillaries supplying them, and their consequent distension from the undiminished *vis a tergo*, an indiscriminate effusion of liquor sanguinis will take place through their walls, and a simple watery elevation of the cuticle covering a papilla will result: in other words, a spot of Herpes makes its appearance. This, speaking of idiopathic Herpes (the supposition that the impression may originate in the associated cerebro-spinal nerve will be shortly examined), runs a simple

course, ending usually in desquamation of the cuticle and complete recovery. This statement coincides very nearly with Hebra's* view of the development of papule and vesicle, i. e. as regards their anatomical structure, but he is silent on the important preliminary influence exerted by the nervous system in this sequence of events.

Confining our examination, for the moment, to idiopathic Herpes, we would remark on the interest that attaches to defining more accurately the nature and *modus operandi* of the shock which is the exciting cause of the disease. On this point physiologists do not appear to have been very successful in their investigations. Von Barensprung's deductions from his elaborate analysis of fifty-six cases of Herpes, for instance, is far too intricate to be satisfactory. This general failure appears to us to arise from pursuing the search after causation in obscure theorisings, rather than by observing those prominent indications found to be present in a great variety of examples, and endeavouring to connect them with their true cause in the economy. Thus the excellent analysis of gunshot cases from America affords new and highly suggestive material for inferential argument. Certainly, one fact most plainly taught by these *traumatic* instances is, that the chief symptoms of idiopathic Herpes—vesicles and neuralgia—will make their appearance in the traumatic cases within the limits of a single member, close to which appearances, also, a well-recognized cause is located, independently therefore of any nerve centre. Why then should not the same thing happen in Herpes, acknowledging no direct violence as its cause? The usual sites of the disease are just those where the body is exposed to violent impressions, especially from cold—the face, the trunk (about the spot where there is usually a division in the wearing apparel), and on the penis, where, as in Mr. Paget's case, it was distinctly referable to a definite local cause.† And in order to dispense with the idea of the cause

* *Vide* note pp. 8, 9, "Hebra on Diseases of the Skin," published by New Syd. Soc.

† While engaged in the compilation of this paper, a case came under our notice strongly corroborative of the above statement. A little girl, aged 3½ years, took a long journey in a waggonet during the prevalence of a cold north-easterly wind. Though well covered with a rug in front, it escaped observation that the seat against which the child leaned was open at the back (as is usual in this kind of vehicle), and the short skirts of the child resting upon the seat, allowed an almost uninterrupted admission of cold air to her waist. The following day, though previously in good health, a dense streak of Herpes began to make its appearance round the left half of the body, about the line of junction of the child's skirts and the more closely fitting portion of its attire. This patient is still under observation—Aug. 3, 1867.

of the usual forms of Herpes being reflex in its character, it is only necessary to suppose the sympathetic nerves accompanying the distribution of a given artery to be stunned, so to speak, by the violence of a sudden impression, when, as a consequence, the control exercised by them over the capillary circulation of the part to which they are distributed will be withdrawn. This supposition will give a state of things the exact counterpart of that already depicted as resulting from direct injury ; or, in other words, such a disorder of the mechanism of the part as is calculated, according to the previous statement, to produce an Herpetic rash.

The fact of pain (neuralgia) taking place in company with the rash will be found to support rather than negative the foregoing line of argument. This must arise from implication of sensitive fibres ; and the question will suggest itself, how can this happen if reflex involvement of the spinal nerve be excluded from the process ? A moment's reflection will remind us that besides the capillary circulation of the skin, there is another set of capillaries arising from the same artery as these, and which are very intimately associated with the spinal nerve. We refer to the *vasa-nervorum*, the nutrient vessels of the sentient nerve itself. Now, as these possess such close anatomical relations to the capillaries of the skin as consist in identity of origin and continuity of sympathetic nerve supply, they will acknowledge the same impressions and manifest the same behaviour under them, as do the capillaries of the skin under similar circumstances. Consequently, instead of that state of tone which allows nerve-nutrition to go on, there will ensue synchronously with the corresponding skin phenomena a state of dilatation of these vessels, and exudation from them of watery elements between the fibrillæ of the nerve. This fluid, being confined by the dense fibrous sheath of the nerve, produces a mechanical stretching and compression of its constituents ; and these being for the most part sensory fibres, it would be difficult to imagine anything more likely to give rise to pain than the state of things now depicted.

Sometimes, indeed, blood is mixed with the effused fluid, and dermatologists speak of exceptional cases in which hæmorrhage takes place into the floors of the vesicles. In these cases the pain is most severe, and obstinate in its persistence ; and, indeed, we can now easily understand why it should be so. For, as a parallel state of things will obtain in the capillaries of the *vasa-nervorum*, as in those supplying the skin, we can readily see that blood so effused among the nerve fibrillæ will give rise to more severe disturbance of those fibrillæ, and that the pain so occasioned will be both more

severe and longer in duration than if the exudation were serous only.

Arguing upon the established physiological premises already quoted, it must be allowed that there is another way of explaining the influence exerted over the capillaries of the skin in this disease, and that is directly through the cerebro-spinal nerve, the direct stimulation of which produces dilatation of the vessels concerned. In order that this effect may result through the channel now indicated, the impression must partake rather of the nature of a stimulus than of a paralysing shock. The impression will be much milder under the former supposition than the latter, and the result will subside in a comparatively short period; all of which suppositions have corresponding conditions in the milder and more transient varieties of the disease. In this way we arrive at the same result—atonic distension of the vessels, though to a much less extent, and thereby to the same train of consequences as has just been ascribed to the withdrawal of sympathetic nerve influence from the sudden application of a shock.

It is probable that both these modes operate in different classes of the disease, and the question will be suggested, is it possible to distinguish in a given case whether the symptoms depend on such a shock as suspends the action of the sympathetic nerve supplying the seat of disease, or whether they acknowledge for their cause an excessive irritation of the cerebro-spinal nerve? This differential diagnosis is manifestly of importance with a view to treatment, though probably a sufficient number of examples have not yet been observed to allow of this question being definitely settled. Some already detailed, in which extreme atrophy of the lower limb was associated with neuralgia and starvation ulcers of the skin covering it, and in which a cure was effected by performing the crucial experiment of dividing the popliteal nerve, show distinctly that a cerebro-spinal nerve may act as we have indicated. They point out, moreover, that the chain which maintains the morbid action requires to be forcibly sundered, in order that its effect may be successfully checked.

But there are certain peculiarities about these instances which make it probable that where they do not occur, the other alternative—that of depressed sympathetic influence—must be looked to for a solution of the problem. Such a symptom is the occurrence of cutaneous ulcers rather than of the vesicular rash which more frequently exists. And if the hypothesis we have adduced to account for the herpetic eruption, palsy of sympathetic fibres, be correct, we see how faradization, by restoring their influence over the capillaries, is

calculated to be of service here; and this, indeed, is the treatment which in many instances is alone productive of good.

Moreover, the reason why the consequent neuralgia continues long after the skin eruption has disappeared, admits of explanation equally by either of these views. For the effused fluid which will occur under either condition not having a free surface as in herpes of the skin to discharge itself upon, is diffused along the track of the nerve, being retained within its sheath, and is only removed by the tardy process of re-absorption: a circumstance this the full import of which will only become evident when it is adduced to explain the weary prolongation of pain so characteristic of the traumatic cases of neuralgia. We might here examine the proposition that the shock in question produces its paralysing effect at one and the same time upon the elements of both sections of the nervous system supplied to the diseased part. In such a case the predominance of circumstances will be such as result from the withdrawal of sympathetic nerve influence, and consequently the remarks already offered under this head will be equally applicable here.

In reference to the more severe, the traumatic phase, of the disease, one or two considerations have yet to be dwelt upon. Allied to the vesicular rash, as regards causation, is the mottled condition of the integument, which is described as "red and pale in patches," and is the common accompaniment of the chronic cases. Its explanation consists in the persistence of that state of the capillaries which was adduced in interpretation of the rash, where we found the smallest arteries and their ultimate ramifications gorged with blood driven into them by the heart's action. But this *vis a tergo* is insufficient for complete capillary circulation, which, in accordance with the well-known physiological axiom, requires for its maintenance "the active performance of those nutritive and other operations to which the capillaries are subservient." These being in abeyance, owing to the loss of tone in the walls of the capillaries and the exudation through them of liquor sanguinis, as already intimated, it is obvious that a dead-block of the circulation will occur in the capillaries of the patch of integument subject to the depraved nervous influence. But the stasis will be characterized by this peculiarity, that while the part of the vascular plexus pertaining to the artery will be gorged with blood, that belonging to the veins will be empty. A physical condition this, calculated to present to the eye, when seen through the integument, a blotched and mottled appearance. In addition to this, the affected track is often the seat of œdema, owing to the vascular network throughout

allowing the effusion of serum into the areolar tissue, and irrespective of that special exudation described as taking place in the papillæ.

Nutrition of the skin being thus in great part arrested, it needs but little reflection to understand how, gradually, the tissues concerned become atrophied, and are at last reduced by starvation to the faintest representation of their original constitution. The same explanation applies, *mutatis mutandis*, whether the subject of investigation be atrophy of muscle or glossy skin.

With the suspension of chemical action consequent on arrest of nutrition, much of the heat naturally generated when the tissues are in health will be absent; and hence we find a considerable diminution of temperature in the more severe instances of the disease. The processes of irritability in the affected tissues being reduced to almost their lowest ebb, occasionally sink below the point consistent with the maintenance of their position in the living economy, when a circumscribed necrosis of the texture implicated will ensue. Such is probably the explanation of the necrosis of jaw in Mr. Paget's case, and of the ulcers of skin in those examples where they are present.

From the preceding considerations we arrive at the following conclusion respecting the correlation of neuralgia and cutaneous exanthema,—that, owing to the suspension of the regulating power exercised mainly by the sympathetic nerves over a given artery, effusion of fluid takes place from its ultimate ramifications. These being distributed to the skin on the one hand, and to the texture of the sensory nerves on the other, the effusion so caused produces the herpetic rash in the former, and pain from mechanical pressure in the latter.

In conclusion we would remark that in attempting to apply this theory to the elucidation of the phenomena of disease, we may, doubtless, have advanced views which a better knowledge of its facts and teachings may show to be erroneous, and which may require to be modified accordingly.

AN ACCOUNT OF THE RECENT PURPURIC EPIDEMIC
IN DUBLIN, AND IN OTHER PARTS OF IRELAND;
PARTICULARLY AS REGARDS ITS CUTANEOUS
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ON the 16th of May, 1866, Dr. Lyons of Dublin, published in the *Medical Press and Circular*, an account of a remarkable case to which he gave the name of "Black Death." In this case the patient, a young unmarried lady aged 22, was attacked with chills, headache, and sick stomach, between 10 and 11 a.m. After the lapse of some hours, Dr. Lyons saw her pulseless but conscious. Her eyes were much congested, the tongue was furred, the lips livid; while the face, forehead, neck, trunk, arms, hands, and back of fingers, were covered with irregularly shaped dark purplish patches, from the one-eighth of an inch to a quarter and a half inch in diameter; and on the back some of the patches were an inch and a half in long diameter, and half to one inch across, and of angular outline. The lower extremities presented several spots of a similar kind, with a general dusky purplish discoloration of the intervening skin. The patient died in sixteen hours from her first attack, with all the ordinary symptoms of extreme typhous prostration; the cutaneous discoloration having before death considerably extended. In fact, so general was the discoloration at this time, that Dr. Lyons says, "the soles of the feet and plantar aspect of the toes were the parts least affected with this deadly tint." In the same journal, Dr. Hayden of Dublin, published another case on the 23rd May, 1866. A young healthy married man returned home in the evening, had a rigor and passed a restless night. Next day he complained of pains in his legs, was feverish, conscious, and showed no signs of sinking. "The hands and feet, however, were covered with dark livid blotches, and on the face and neck was a rash, resembling very closely in tint and general appearance the eruption of measles." He died that evening.

In the same month Professor Banks asked me to see a remarkable case then under his care in Sir P. Dun's hospital. This case is detailed in the *Medical Press and Circular* for

May 30, 1866 : the patient was ill three days, and after death a careful P.M. examination showed that cerebro-spinal arachnitis existed, as Dr. Banks had believed. This case, however, materially differed from other cases of cerebro-spinal arachnitis which Dr. Banks had before seen, and which wanted "the deep cyanotic hue of the skin" so plainly evident in the present instance. On the third day of his illness, the hands, patellæ, ankles, and feet, assumed a deep violet tinge, somewhat patchy about the ankles. There was not any extravasation of blood; and the urine was found to be loaded with albumen, markedly acid, and not deficient in chlorides.

Shortly after this date a few other cases were published, professedly cases of the same epidemic: none of them, however, presented appearances of cutaneous discoloration.

The cholera now reached Dublin, and during the remainder of the year 1866 the "black death," as it was called, seemed to have almost entirely subsided. In the *Dublin Quarterly Journal* for Feb., 1867, Dr. Banks in a paper entitled "Clinical Reports and Observations on Medical Cases," described a case which he saw on the 30th Dec., 1866, in consultation with Mr. Newland of Dublin. The general symptoms were those of cerebro-spinal arachnitis; and Dr. Banks in describing them referred to his former case, which I saw in Sir P. Dun's hospital.

The patient was a lad aged 15, and like all the preceding cases he died in a few hours. "The legs and arms presented an extraordinary appearance, being covered with spots of a purple colour, of different sizes, some regular and round, and about the size of a florin, others irregular in shape. On pressing the finger over the surface, the spots were found to be slightly elevated. The body had some spots, but not many."

In the *Medical Press and Circular* of 3rd April, 1867, Dr. Ridley of Dublin published another case which occurred in a lad aged 17 years. His illness also commenced with rigor in the evening. Next day at eleven o'clock, small dark spots of the size of grains of shot appeared over the face, as well as on the feet and legs. At two o'clock the black spots on the face reached the size of a sixpence, the nose and lips swelled and became livid. The spots on the legs likewise extended, as did those on the toes to the soles of the feet. The action of the heart in this, as in all the preceding cases, was scarcely audible. At half-past six o'clock the face was like "a livid mask;" the swelling of nose and lips further increased; the spots on other parts of the body had become "large patches." He died in twenty-nine and a half hours from first illness.

The body after death presented the following appearance : Face and head much swollen, particularly the nose and lips, and covered with a large black patch, which extended from the malar bones to the chin, and across the face ; dark patches down the front of the neck, also down the arms, which were of a dusky hue ; hands livid and spasmodically contracted. A few scattered spots on the body, the thighs and legs covered with large black patches, the toes perfectly black, and the black appearance extends down the soles of the feet to the heels.

Dr. Benson, Junr., treated in the City of Dublin Hospital another case, which he published in the *Medical Press and Circular* of 24th April, 1867. The patient was a healthy servant boy aged 14 ; and his case differed from the others noted, in that he had a period of incubation, if I may so call it. On the 7th of April he was "slightly indisposed ;" on the 8th "he had a stupid aspect," and poked the fire all day in a state of abstraction ; on the 9th he died. Thirty hours after death a P.M. examination was made, and Dr. Benson fairly deduces from it that there was not any cerebro-spinal meningitis in *that* case at least. He further states that—

Every part of the body [which was already partly decomposed] had purple spots on it ; the chest and upper part of abdomen were least affected ; the ears, the sides and back of neck, and the legs were most discolored ; on the legs more especially than on any other part, there were seen three well-defined degrees of discoloration. Firstly, there was a ground, so to speak, of rather light purple, which had left but few patches of healthy-coloured skin. On face, chest, and upper part of abdomen, this ground did not appear at all. Secondly, very much less widely diffused, there were darker spots, varying from the size of a three-penny piece to that of a crown, of very irregular shape. And thirdly, there were a few very dark purple spots, almost black, scattered over every part of the body. The spots on the face, front of neck and chest, were, with few exceptions, small and rather dark—some not larger than a line in diameter. The tips of the ears were of a very dark purple, almost black ; the conjunctivæ had a few dark, well-defined purple spots, especially the palpebral portion of that membrane. The gums had a few slight patches, but the inside of the mouth and the fauces were quite free. On the soles of the feet the spots were not quite so numerous as on the dorsum and sides, and were rendered paler in appearance by the thickness of the cuticle. The whole of the back of the body was of a nearly uniform darkish purple, a good deal of which was, no doubt, a post-mortem effect. The body had been lying on its back since death. Some of the darker spots could be seen through this purple ground, and some parts were pale, as the nates and back of chest, on which the weight of the body pressed, between these the darker spots remained unaltered.

In this case there does not seem to have been any cutaneous

discoloration during life, nor did the brain or spinal cord furnish any evidence of cerebro-spinal disease. This was the first case of the epidemic *published* in which dark discoloration was found after death, but not during life. At the time of its publication, however, and for some time before, I had in type a paper of my own which referred to a very remarkable case wherein this peculiarity also existed. My paper appeared in the *Medical Press and Circular* of the 1st of May, and referred to a case which I had treated in the preceding March. It was entitled: “*An Account of a Remarkable Case in which Dark Cutaneous Discoloration occurred shortly after Death: with Observations on its supposed connection with the morbid phenomena recently known in Dublin as ‘Black Death.’*” The following is an abstract of such part of that paper as referred to the case itself:—

On Tuesday, the 19th of March, 1867, I was called in to see a young lady, aged 20 years, and unmarried. She resided in one of the best suburban streets of Dublin, was endowed with considerable personal attractions and accomplishments, had been more or less “of a nervous habit,” as the phrase is; but, as to her general health, while never very strong, yet she had always been free from serious disease, and rarely troubled the doctor. On the preceding Saturday, one of the severe snowy days which the Siberian spring of 1867 brought us, she had gone to a friend’s house, and while there had fainted. This was traceable to the fact that the catamenia, which with her were habitually regular, had been delayed a day or two beyond the proper time. At, or immediately after this fainting fit, they came on, and presented nothing worthy of remark, but she felt weakened and knocked-up by the fainting, and so was in bed when I first saw her, three days after this had happened. I did not find anything serious the matter at this visit, and, beyond enjoining rest in bed, keeping the feet warm, using effervescing drinks of lemon-juice and alkali, and some purgative medicine to relieve constipation, with which then, as at other times, she was troubled, I adopted no active measures, as they were not needed. I need not continue a daily detail of symptoms, but it may suffice to say that very soon she showed most of the symptoms of acute, or, more correctly, *sub-acute* gastritis. Nothing remained on her stomach, and it was very difficult to hit on something which could be retained. The matter vomited was for a while biliary, and then green; there was no pain complained of over the stomach, but she frequently complained of a headache, which seemed more or less continuous and frontal. There was no intolerance whatever to light; the urine (though not tested) presented nothing abnormal; the pulse throughout her illness averaged from 76 to 84; the tongue was red at the edges, with intermitting patches of white in the centre; it was moist throughout, except for part of one day, when it was dry and brown; the skin was acting throughout the greatest part of her illness, and the only other symptom which appears

worthy of note was the frequent complaints which she made of weary pains everywhere, but particularly in the limbs and back.

By steady perseverance in the mode of treatment described in my paper, she gradually got better and better every day. The vomiting became at first less in quantity, then less frequent, and finally disappeared. For parts of two or three days she had left her bed and lain on a sofa in the bedroom, and once she had gone down-stairs in the evening. While the gastric symptoms were thus disappearing, she complained frequently of a cough. At first I thought this to be hysterical; but as it continued, I examined the chest, and finding some signs of irritation at the lower and back part of the right lung, I had turpentine stupes applied to it frequently, and so this symptom also abated, but not without disturbing the stomach a few times. Occasionally would come a fit of coughing, which sometimes resulted in forcing up the contents of the stomach. When this occurred, however (and I saw it myself), there was no morbid matter whatever discharged, but simply the food or drink which she had been taking a short time before. It differed thus from the gastric vomiting first noted, and was in fact put a total stop to by the application of a sinapism to the stomach. I may here add that she was nursed with the greatest care and good sense throughout her illness.

On Thursday, the 28th March, I was sent for to see her in the afternoon, having visited her a few hours before, and I found her friends in the greatest alarm about her condition. She had complained of what they conceived to be paralysis, a feeling of numbness creeping up the left side of the body to the top of the head, and including the limbs. As I could not be found when wanted for this emergency, Dr. Powell, of Upper Leeson-street, to whom an account of these symptoms was given by one of her sisters, sent her a mixture containing sal volatile and chloric æther, the administration of which completely disposed of the symptoms already detailed, so that when I arrived soon after, there was no appearance of them whatever. For some time from this date the patient manifested various symptoms which I looked on as hysterical. There was the occasional rejection of the contents of the stomach, which was stopped as before mentioned, this vomiting largely depending on the power of volition; for I found that as a rule, such things as I myself gave the patient, requesting her at the same time to retain them, were for the most part retained; while the rejection of food generally took place in my absence. The mere fact of touching her limbs as she lay inclined to her left side, seemed to occasion her acute pain, unless reasoned with; so also with the power of swallowing, of opening the mouth, of moving the head, which latterly became drawn to the left side, and of other movements which were plainly under the control of volition. She had convulsive movements also; threw the arms about; felt the weight of the bed-clothes, and pulled them partly down; kept grasping some imaginary object with the hands, and occasionally putting the hand to the throat as indicative of a sense of suffocation. Then there was occasional delirium, out of which she was occasionally aroused by me, even when she could not be aroused by her friends; there was constipation, removed by enemata of tincture of asafœtida, which also modified—or after which

were also modified—several of the symptoms just mentioned. The urine at first passed naturally, then was suppressed, but came away copiously and involuntarily after stuping the pubic region with hot water.

The skin was of normal temperature, with occasional diaphoresis, and the general tranquillity of the circulation was specially worthy of note. The headache was not at all complained of as at first, and complaints respecting it soon ceased; sleeplessness was more or less complained of; nourishment and suitable support were continuously given, and with invariably good effect on the cutaneous and circulatory systems. There was a total absence of convulsive movements of the muscles of the face; the pupils were not dilated; there was no morbid appearance on the skin, which was then, as in health, remarkably fair. On Sunday evening, the 31st of March, I found that she had passed a sleepless day, and that the delirium could not be interrupted as before, though after a few attempts I succeeded in making her recognise me, and address me by name. On the next morning (1st of April) I found that she had passed a sleepless night, with more or less noisy delirium and resistance to her being in any way moved in the bed. I now observed her pupils to be somewhat dilated, but not remarkably so, and this was while she lay with her back to the light. In the course of the day I had the advantage of a consultation with Dr. Churchill, who saw the case with me. I was knocked up at four A.M. on the 2nd of April, and on arriving at the house found that she had been dead about an hour. From Dr. Powell, of Upper Leeson-street, who had been sent for, I learned that soon after three A.M., he came and found her grasping at her throat, unconscious, and dying. As she had trismus which would not yield, he could not give any restorative by the mouth, but administered strong solution of ammonia to the nostrils, and put a sinapism to the throat. This plan caused a temporary, but momentary reaction; and so the patient ceased to breathe. A *post-mortem* examination was not obtainable, and as I was aware of the existence of cerebro-spinal arachnitis in Dublin, and as, in consultation with Dr. Churchill, the marked and complicated nature of the case had been mentioned in connection with the possible existence or super-vention of that affection, I resolved to obtain such *post-mortem* information as I could get by viewing the remains. Accordingly, when I saw the body at 4.30 A.M., it was perfectly unmarked by any discoloration. About mid-day I was not surprised to hear, in answer to my query, that it had soon after death turned black, or dark purple, to a large extent—the face, hands, legs, but not the feet, and all the back parts, from the neck downwards, being so affected. I went up and saw it, and perceived that this colour had disappeared from some of these places, particularly from the face, but it remained on others. The hands were convulsively closed, and could not be straightened, the right foot was convulsively inverted, and the eyelids could be kept closed only with difficulty. The abdomen was enormously swollen, and black blood in quantities had been pouring from the mouth all day, so that the body had to be put into a coffin that evening. With this there was a most offensive smell of decomposing animal matter. Late that night, some time after the body had been laid in the coffin, a convulsive movement of the abdomen took place, somewhat re-

sembling vomiting, and was followed by the ejection from the mouth of a quantity of black bloody matter, with a smell which no perfume, not even chloride of lime, could cover or dispel. Next day the face had become covered with purpuric spots, and had so swollen that it could not be easily recognised, and so thorough and rapid was the decomposition, that the coffin had to be closed. I never before saw a case in which the human face became so quickly decomposed, and literally "dissolved;" and it was the more remarkable, as it was one of unusual comeliness, which, throughout an illness ranging over about eighteen days, had not exhibited the ordinary changes which the countenance undergoes in disease.

In the *Dublin Quarterly Journal* for May, 1867, Dr. Gordon published an exhaustive paper entitled "Cases of Fever with Cerebro-Spinal Meningitis." He described five cases, and observed that the first, which occurred in Dublin, was that of a young woman who was treated by him in the Hardwicke Hospital on the 5th of April, 1867, and who, "contrary to what usually happens in the earliest cases of a new formidable epidemic," *recovered*. His first case was an instance of the combination of the peculiar eruption with the symptoms of cerebro-spinal irritation. The second patient also had that combination, and he died asphyxiated. The third, who also died, had not post-mortem appearances sufficient to connect the death with cerebro-spinal disease as cause and effect. The eruption in this case consisted of "some few spots, like stains, or the *taches bleuâtres* seen in typhus fever," which came out over the body, particularly over the lower part of the chest and abdomen. Case II. was the most rapidly fatal of any recorded up to this date, as it lasted only *five* hours. Case *four*, a girl aged 15,—all the preceding were also young,—had cerebro-spinal symptoms and post-mortem appearances. She had spots of a "brownish-red" colour, with white centres and light-red circumferences. "They were all raised above the skin so as to feel like a weal." On the day after her admission to hospital "her spine presented a most wonderful and uniform curve concave backwards; her head was now also curved backwards on the spine of the neck." Her delirium was peculiar, and it resembled that described in my own case already noted. "Towards evening of the third day after admission she became very much flushed, and perspired freely. Some fresh spots, black as ink, appeared on her elbows and feet; a mixed eruption—a few spots of bullæ, which rapidly became opaque and dusky, several patches of herpes, which rapidly became flattened and dark-coloured. One or two of the original dark-coloured spots near the knees were rapidly passing into gangrene." On the following day she gradually passed into

unconsciousness, kept up a muttering delirium, the herpetic eruption on the lower extremities increased, and she died soon after midnight.

The post-mortem examination proved the case to have been one of cerebro-spinal meningitis, and therefore I need not here further refer to it, save to give the following telling extract from Dr. Gordon's description :—

The body after death presented a very frightful appearance. It was still prominently arched forward. It was of a dusky-blue colour, and with a copious eruption of black spots, of various sizes, from that of a small pea to a crown piece ; some small and circular, others large and irregular in form. One or two of these near the knee had taken on a gangrenous action, and appeared to be rapidly spreading ; several of the smaller spots were effusions into the layers of the skin, very prominent, hard, black, and circumscribed, like the minute spots of apoplexy in the lung. There were, moreover, various patches of herpetic eruption on different parts of the body, and several bullæ containing dark-coloured serum.

Dr. Gordon's *fifth* case occurred in a grocer's assistant, aged 21. It was remarkable for its chronic form and for various complications which arose during its progress. The patient recovered, and gradually passed into a state of mere organic life. The spots in this instance were bluish-black, and the herpetic eruption, which was present over the nose and lips, had "a horrible appearance, being perfectly flat, and becoming black." These cases Dr. Gordon gave as typical of the various forms in which the disease presented itself. He had seen many more, but his conclusion was that *all* gave evidence of a diseased condition of the blood, and of a profound nervous lesion. He also noticed particularly the sudden invasion of the illness, and the almost universal occurrence of herpes, chiefly on the nose or lips, as noted in the late monograph by Maunkopff of Berlin, who considered it to be Herpes Zoster. The group of vesicles, generally twelve in number, was mostly circular, and occurred in the majority of grave cases.

In a review of the subject, among other remarks, Dr. Gordon thus writes of the eruption :—"This dark eruption, which forms so prominent a feature in those cases, is clearly owing to an infiltration of dissolved hematine, entirely dependent on the decomposed state of the blood, and is not to be looked on as simple extravasation. This is proved by the colour of the eruption being often of a pure black, sometimes brownish, but never exactly like extravasated blood ; by the turbid brownish fluid in vesicles under the epidermis, so often seen accompanying these black spots, constituting what Vogel terms gan-

grenous action; and by the secondary action to which these spots are subjected, rarely absorption, more usually purulent, or even gangrenous reaction. It is probable that in some instances, particularly those in which, like cases II. and IV., there is a rapid effusion into the spinal canal, the origins of the sympathetic nerves may be affected, and so, through a failure of the vaso-motor nerves, extravasation and other phenomena of deficient circulation may be developed."

On the 22nd of May the Medical Society of the College of Physicians of Ireland commenced a series of meetings to discuss the epidemic, which had by this time extended into the country, and even into remote districts in Ireland.

The first paper read was written by Surgeon-Major Cogan, of the 2nd Batt., 2nd Regt. and referred to five cases which occurred under his observation in connection with the Thurles flying column, which had been subjected to great hardships during the Fenian insurrection. In the cases themselves there is nothing more remarkable than in those I have already noted. All had the peculiar eruption, and Surgeon-Major Cogan thus comments on them:—

The foregoing five cases occurred within the past month in these barracks during an outbreak of typhus and continued fever among the troops; and, I think, it is clearly proved that it was not from defective ventilation, overcrowding, nor bad drainage, the disease made its appearance here, but entirely depending on the importation of it from Thurles by the men who had been there.

The first case (that of the child whose father had not been with the flying column, but his mother washed for the men who had been out) made its appearance during the time the first washing was being done after their return. The next was the young married woman, whose husband had been out, and afterwards they slept together; and the recruit, who slept in the same room with the other men who had been out. The origin of the disease in the two children last mentioned can be similarly traced.

The striking features of the disease are the febrile symptoms, and the purple eruption making their appearance at the same time, and the delirium setting in so soon afterwards.

Dr. Gordon next read a paper in which he laid down the general principle that two distinct sets of cases, of each of which he furnished an example, ought to be classed under the one nomenclature. Certain symptoms predominated in each and not in the other, while in all there was evidence of blood-poisoning and other lesions, which I cannot here detail. The first typical case here read by Dr. Gordon occurred without any cutaneous eruption. It, with all the preceding part of the papers just referred to, is given in full in the *Medical Press*

and Circular for 29th May, 1867, but his second typical case is thus described:—

A young gentleman about 23 years of age having bathed when somewhat fatigued, was attacked with the usual symptoms of anorexia, and shortly afterwards his face and the upper part of his body was covered with an eruption somewhat like measles, but the patches were irregular in size and shape, they were dark-coloured, they were rough-looking on the surface, they could be more or less completely effaced by strong pressure, they were thickly interspersed with petechiæ, they spread gradually over the whole trunk, being most thick on the back, passed down the thighs, and have come out sparingly about the knees, and on the dorsum of the feet.

In this case the eruption forms the grand prominent feature (it is totally unlike measles, and may at once be excluded from the ordinary exanthemata by the mode of its development, and by its duration. It is still coming out on the lower parts, and has not yet disappeared from the upper part), the other symptoms of blood contaminated are, as in the lady's case above referred to, a weak condition of the heart, a feeble but not a rapid pulse,—80 is about the average; but we have the following symptoms of a secondary affection of the cerebro-spinal meninges—corrugation of the brow, occasional pain in cervical region, sense of weight in head, occasional subsultus, nausea, and sometimes diarrhœa, with a furred, and that peculiar symptom, a greenish tongue.

Dr. Gordon was followed by Dr. Lyons, who read a paper giving details of three cases. The first occurred in a cavalry officer, aged 19, whose illness began as in some others previously noticed. On the second day—

At eleven A.M. symptoms of congestion of the brain set in, small dark spots became now visible which had not existed before; the head symptoms increased rapidly and resisted all treatment (external). Internal treatment being impossible, as he could not swallow.

Towards the end the action of the heart and strength of the pulse became gradually weaker; the respiration more impeded, and he quietly sank at about one P.M., having been insensible since eleven A.M. There was no retraction of the head.

There was no post-mortem examination made.

The body was seen at about 1.45 by Dr. Stokes and Dr. Lyons. The head and face, as well as the neck, were of a dark cyanotic tint. The surface of the body generally was not abnormally discoloured, but on the back there is a considerable amount of deep congestion of the skin between the shoulders and down to about the waist.

Here and there upon the back, flanks, abdomen, calves of the legs, and inner part of the thighs, were to be noted some dark, bluish-black spots, perhaps a dozen in all, some angular, some irregularly rounded, from two to three lines in diameter, unaffected by pressure, not prominent above the skin, and feeling firm to the touch.

Dr. Lyons' second case occurred in a young woman, and was rapidly fatal. Of the eruption he says :—

The most notable feature about the case was beyond all question the presence of numerous dark purple spots, thickly strewn on the jaw, trunk, and extremities. They varied in size from that of a sixpence to that of a half-crown piece and upwards, and here and there seemed to run into each other, while in various parts of the body the intermediate skin wore a general dark cyanotic hue.

Of his third case, which also was rapidly fatal, he writes :—

The eyes were slightly injected, but the pupils were perfectly natural ; the face was greatly discoloured, or rather somewhat dirty-looking, with two or three angular spots on the left cheek, of blue-black colour, firm to the touch, unaffected by pressure, perceptible as lying in, above, and beneath the skin, and very much of the character of what are known as creals. These spots were found on the face, arms, forearms, back of hands, on the trunk, and a few on the thighs and legs, which were generally somewhat of a cyanotic hue

Of the three cases just cited, it is to be observed, that as well as those previously recorded by me, all occurred in persons apparently in full vigour of health, with well-developed and well-nourished frames, of full habit, and in whom the adipose tissues abounded.

They are new to me in the character of the cutaneous spots and patches which they present. They all showed an absence of specific lesion of the nervous system, so far as I read right their pathological indications, and long prior to their occurrence, during their prevalence, and since I have had under careful observation and treated numerous instances of the best marked specific lesions of the central portions of the nervous system and their membranes which this city has afforded.

Dr. John Hughes followed Dr. Lyons, and detailed three cases. In one of them he describes the nervous symptoms in detail. I need not here repeat his description, as it resembles some of those already given ; but, continued Dr. Hughes—

Superadded to these symptoms, there was a peculiar eruption of dark-coloured, livid, almost black, spots, over the entire body, except the neck and scalp. The eruption was, however, much more abundant on the face and extremities than over the trunk ; and the size of the spots was also larger in the former than over the body, in some instances attaining the size of a sixpence.

Those spots were irregular in shape, but the smaller ones were circular, or slightly oval. In fact, looking at the child as she lay in bed, a superficial observer might not unnaturally conclude she was labouring under an attack of measles of an asthenic or malignant type.

Three days later he reports that the cuticle over those spots which were noticed to be the darkest is now raised by effusion of a sero-sanguineous fluid beneath it.

Surgeon Haverty, 52nd Regiment, followed Dr. Hughes, and detailed a case which was marked "with a livid purple hue of countenance;" also a second, in which intense lividity began to appear directly after death. In a third, which, like the preceding, was fatal, on the second morning:—

Large livid purpuric spots were now seen about the lower limbs, and signs of general prostration came on; the conjunctivæ were deeply congested, the ends of the fingers and finger-nails were livid and numb; the surface of the body, though not cold, was not warm; the tongue was thickly loaded with bright yellow deposit; the pulse was scarcely perceptible, but the heart's action, examined by the stethoscope, was not correspondingly weak; there was no approach to convulsive action.

In a fourth a few livid patches appeared on the thighs and legs, "larger than petechiæ, but not so large as those of purpura."

Mr. Croly followed Surgeon Haverty, and gave five cases. The first of these was, perhaps, the first known to have occurred in Dublin, as it happened on the 18th March, 1866. The third occurred in a medical student. Full details of all these are given in the *Medical Press and Circular* for 5th June, 1867. All were fatal, and all had the purpuric eruption.

Dr. Atthill read notes of a case which happened in the person of an infant aged nine months. The child recovered, although it had spots varying from the size of a split pea to an inch and a half in length over the upper and lower extremities; but none on the neck and trunk. The Meath Hospital report embraced cases which had been under the care of Drs. Stokes and Hudson. Of one of these cases, which was fatal, the report says:—

Eruption.—On the legs and arms were found spots of a dark purple colour, and of different sizes; all of them accurately defined and circumscribed, also slightly elevated; perfectly indelible on pressure, and in places covered with tiny papillæ, or even vesicles. The largest of these spots was about the size of a sixpence. They were confined to the extremities, with the exception of one or two small ones on the face, and many over the glutæal region.

Besides these spots there was noticed on the chest a mottling of the skin, almost passing into the form of petechiæ in places; besides a dusky hue like that of typhus.

Autopsy.—Four and a half hours after death.—Spots unchanged in appearance. Over one spot on the *right* leg a large vesicle had formed, containing

a considerable quantity of serous fluid. It will be remembered that it was in this, the *right* leg, that the pain first set in at the beginning of the patient's illness. The cuticle was not stained by the extravasation, as it was found normal in colour on raising it from off one of the spots. On the chest some brownish petechiæ were visible.

In a third case "round the mouth was noticed a complete ring of herpetic vesicles." Another was complicated with measles, "which disease supervened in the course of the purpuric fever, and seemed to suspend it."

Dr. Hayden detailed two cases; one had "dark blotches resembling vibices; the other had spots "in colour nearly black, slightly elevated, and not affected by pressure." Both were fatal; and were by Dr. Hayden considered to be cases of cerebro-spinal meningitis, "with the accessory manifestation of cutaneous ecchymoses and eruption."

Dr. Darby, of Bray, read notes of two cases which had the peculiar eruption—one died; the other recovered.

The concluding paper was a letter from Dr. Crooke, of Macroom, to me, regarding my case published on the 1st May. In this letter Dr. Crooke, among other cases of the kind, mentions one of his, of which he says: "On the day following her death, her countenance became of a livid, almost purple colour; her stomach became enormously distended on the next day; her face was almost quite black."

In the discussion which followed, and which is fully reported in the *Medical Press and Circular* for June 12th and 19th, various other cases were quoted by many speakers; and conflicting opinions were advanced as to the name and nature of the epidemic. Without entering into a tedious abstract of all these opinions and speeches, it will suffice to give as my own view the following extract from a leading article which appeared on the subject in the *Medical Press and Circular* for the 19th of June, 1867. On that occasion Dr. Stokes presided; and I may add that Dr. A. Smith's paper, quoted below, was a reprint of Clynn's account of the Black Death which visited Ireland in 1348, taken from his "Annals of Ireland," published by the Irish Archæological Society in 1849.

The "*Consensus Communis*" of the Medical Society of the Irish College of Physicians, has pronounced that there recently has been a strange epidemic in Ireland; that the disease in question is *not* the "Black Death;" and that it is not to be called by that most misleading and terrifying title. Further, the general opinion seemed to incline to the view that it was a form of fever in which the cerebro-spinal affection was a secondary disease; that it was not ordinary typhus or measles; that it was blood-poisoning; and that

there was no reason to say that it might not be of a contagious character. The President also observed, "that in some of the worst cases the symptoms of spinal arachnitis were absent, and if, as some supposed, the ecchymosis and eruptions were due to the disturbance of the nervous centres, they should have found, in the worst cases of the disease, the greatest amount of lesion ; but the fact was not so. But [further observed the President], although this disease of cerebro-spinal arachnitis had been naturalized amongst us for years, it was only during the last year that the disease, marked by this singular eruption, had occurred." Finally, the President said that, in his opinion, "this was a disease of the blood of an essential nature, and that the cerebro-spinal arachnitis was unable to explain it." He proposed, with apparently general consent, to call it "Malignant Purpuric Fever."

We have mentioned the President's views specially, and we forbear to mention the opinions of others, because we could not, in the space at our disposal, specify the views of all, and we do not wish to make any selections. It was, however, apparent that *three* views of the nature of this disease were advanced. *One*, that it was a malignant spotted fever ; *a second*, that its essence was a cerebro-spinal arachnitis ; and *the third*, that the two diseases co-existed, the one being superadded, as it were, to the other. The generally rapid and fatal nature of the cases was admitted, and, we may add, that while the epidemic has by no means disappeared from Dublin, where we saw a case of it a few days ago (and one which went far to prove its contagious nature), yet its mortality has diminished according to that general law which seems to hold good with all epidemics ; and by virtue of which those first visited mostly die, and those who have the fortune to be the last visited, mostly recover. We may call particular attention to the valuable historical information supplied by Dr. A. Smith, as to the existence of the "Black Death" in Ireland, an alleged fact almost unknown to Hecker, and which, as was remarked by Dr. Madden, seems to have been wholly passed over by the writers of the "Annals of the Four Masters," the standard authorities in ancient Irish history.

On comparison of the reports which we now conclude with the reports of the Medical Officer of the Privy Council respecting the epidemic called cerebro-spinal meningitis, lately prevalent in parts of Northern Germany and about the Lower Vistula, we must express the opinion that the view of the recent epidemic in Dublin, taken by Dr. Stokes, is most probably correct in its essence, and that the disease in question was not unknown to Cullen, Mason Good, and other standard writers, as a blood poison called by various names, such as "*febris inflammatoria putrida*," "*typhus scorbutica*," and "*febris scorbutica*." Indeed, the last-mentioned name may perhaps fairly be applied to it, judging from the clear description of the affection so designated in the learned work of Daniel Sennertus "*De Scorbuto*," published in 1654.

About the time this article appeared, I saw with Dr. Banks and Dr. Henry Kennedy another very remarkable case at Sir Patrick Dun's Hospital. No record of it has as yet been published, but it was seen by several medical men, and excited

much interest, because the patient, who died, was a distinguished student of Trinity College, who had been removed from his chambers in college to the private wards at Dun's Hospital, where he was attended by Dr. Henry Kennedy and Dr. Banks; and subsequently by Dr. Law. The characteristic eruption appeared here also; and it was particularly observed that on one day the patient spoke little else than Greek, while on another he expressed himself in French and in German.

In the *Medical Press and Circular* for 3rd July, Dr. Ryan gives three cases which occurred in the family of a comfortable farmer at a place called Ballyhoolahan, near Emly. In the same journal for 10th July I published a case which occurred in the county of Cork in the practice of Dr. Crooke, of Macroom, who forwarded his notes to me because of the similarity of his case to mine already noted. Further in the same journal for 17th July appears another case which occurred in Dublin, as detailed by Mr. L. Clarke, the practitioner in charge of it; and so lately as the 25th of July I knew of a fatal case here, although the returns of the Registrar-General show that the epidemic has almost disappeared.

I must not omit to note the papers of Drs. Lyons and Mapother lately read before the Epidemiological Society. Dr. Lyons adheres to the name "febris nigra" as a fit designation for the epidemic; while Dr. Mapother gives valuable statistics about it. According to him, from 16th of March, 1866, to 1st of July, 1867, 63 cases had been recorded in the Dublin district; and about 13 over the rest of Ireland. In Dublin the greatest mortality, namely 15, occurred in April, 1867. He considered it to be the "febris scorbutica" of old writers; and suggested, what I think a very good name for it, "neuro-purpuric fever." No rank of life had been exempt from it, and the mortality had exceeded 50 per cent.

In the *Dublin Quarterly Medical Journal* for August, 1867, Surgeon Haverty, whose cases have already been commented on, published his "Report on the recent Epidemic, &c.," which he had transmitted to the Director-General of the Army Medical Department. This report consists of a record of the cases above referred to, with a prefatory statement giving the views of the writer on the general question. *Inter alia*, he observes:—"Whether the cerebro-spinal affection be taken as the essential expression of the disease, or be looked on in the light of a complication only, it is that which evidently gives most character to the disease all through."

At one of the section meetings of the British Medical Association held here (in Dublin) on the 8th of August, Dr. Gordon read a paper on this subject. This paper may be

looked on as a supplement to his essay above noted. Fresh cases, some existing on that very day, were detailed, and Dr. Gordon expressed the opinion that the cutaneous eruption was an accident, not a necessary accompaniment of the disease, which he believed to be cerebro-spinal meningitis, and which he did not believe to be contagious. The eruption he believed to be of nervous origin; while in the discussion which ensued, and in which I had the privilege of taking part, the opinion was maintained that it was essentially a purpuric affection, and wholly distinct from any form of typhus.

HERPES ZOSTER. REPORT OF FIVE CASES. By W. H. DAY, M.D., M.R.C.P. Lond. Manchester Square.

CASE I.—W. G., æt. 55, m., of dissipated habits, was attacked in the winter of 1862 with the usual symptoms of Herpes Zoster on the right side of the abdomen. He suffered great agony, and was extremely weak and low; the vesications were large and distinct, and contained a dark milky-looking fluid. After breaking and discharging, the ulcerated surface was very difficult to heal. The treatment consisted in applications of lead lotion, and afterwards the benzoated zinc ointment. The after neuralgia was slight, but the patient was cachectic and broken down; his health was never re-established, and he died of low pneumonia in the spring of 1863. Internally quinine and steel and good diet with wine were prescribed.

CASE II.—E. D., æt. 36, f., with two children, and of healthy constitution. In June, 1864, she was confined of a strong healthy child; she was very delicate for some months, and early in November became pregnant. At the same time she began to complain of great pain in the right side and about the right hip. After a few days a rash appeared, and then the pain decreased; this was succeeded by a burning pain, which destroyed her rest day and night: to use her own words, “my clothes were scarcely to be borne on me, yet when the pressure was taken off the pain was worse.” No lotions gave more than temporary relief, but an ointment (ung. zinci benz.) relieved the irritation slightly, and this was continued for three weeks. “It then began to abate, and I got sleep, but I was in the habit of getting up in the night to wet my side with cold water, the itching became so intense in bed. The rash meanwhile changed colour, and the spots

ran into large dark blotches, the marks of which remain on me now" (two years afterwards).

Remarks.—This patient's health was reduced by her becoming pregnant. Her health gives way on such occasions at once, and probably this was sufficient at a cold time of year to favour the occurrence of the shingles.

CASE III.—Mrs. B., æt. 63, in January, 1866, had an attack of Herpes Zoster on the left side of the neck; the vesicles were small, well defined, and did not run into each other, as in the following case. She attributed the eruption to cold, and stated that *two friends residing near her were suffering from shingles at that time*. Lead and spirit lotion gave her great relief, and she took with great benefit quinine, good diet, port wine, and an occasional aloetic purgative. The after neuralgia was slight, and gradually yielded as her strength was regained.

CASE IV.—Captain B., æt. 50, in October, 1855, complained of diarrhoea and stomach disorder, which soon yielded to the usual remedies. He is temperate, and of regular habits. Has lived in India and the Mediterranean, and had fever, for which he was bled and cupped. Has often suffered from dyspepsia, headache, and probably suppressed gout. On the 7th of January, 1866, he complained of dreadful headache and stiffness of the neck. He could not sleep, and was afraid to go to bed. On the left cervical region were several vesications of Herpes; the skin generally in this region was inflamed, puffy, and tender. There were two vesications on the *hard palate and fauces*, also on the *thorax* to the left of the median line. He complained of great soreness down the œsophagus, and said the slightest noise, a dog barking, or the opening and shutting of a door, were agony to him. He was ordered a lead and spirit lotion, a pill containing one grain of pil. hydrargyri and three grains of the pil. rhei comp., and an alkaline and aperient draught in the morning. On the following day the pain was described as insufferable; he looked very ill; the tongue was thickly coated, and the urine high-coloured. On the 9th the neck was much inflamed, the vesications are so large that in some places they are the size of a shilling, having run together and formed blebs; the fluid is clear and transparent. The eruption has extended to the scalp, to the *left ear*, which is swollen, and of an erysipelatous redness, and down to the *left shoulder*. On the 11th there was a spot on the *right forearm and abdomen*; but the eruption is almost entirely confined to the left cervical region, and it has not otherwise transgressed the median line. He is very sallow, worn, and exhausted. On the 12th neuralgic pains extended down the left forearm.—13th. The eruption is fading.

Mr. Erasmus Wilson advised the use of starch or flour, but it produced so much irritation, that it was obliged to be discontinued. On the 19th the eruption had quite faded away, and there was no ulceration.

The after neuralgia was most severe, and continued distressingly painful for months. Notwithstanding this, the general health had so much improved that he had not been so well in health for years. Eighteen months have now elapsed since the commencement of the disease, and he often complains of itching and irritation in the neck. Small white spots mark the situation of the vesicles.

The treatment in this case consisted in mild aperients, with a grain of the acetic extract of colchicum, nitro-muriatic acid with a bitter tonic, morphia to allay pain and procure rest at night, and quinine.

CASE V.—E. R., aged 65, February, 1866, suffered an attack of Herpes Zoster on the right side of the abdomen, which was attended with great pain and debility. She is a woman of feeble constitution, and has experienced an anxious life. The treatment consisted of lead and opiate lotions, and quinine and ferruginous tonics. The eruption was limited to a few vesications. The abdominal pain and neuralgia were severe; but at the end of a month from the commencement of the eruption she was better in health than she had been for some time past.

Remarks.—During an active practice of *nine* years in the country, these are all the cases of Herpes Zoster that came under my notice, and three of the cases happened nearly all together. All the cases happened at a cold time of year; the winter of 1866 was very severe, and three of the five cases related occurred at that time. Other cases were said to prevail also, in the practice of other medical men in the neighbourhood. The pain in all these cases preceded the outbreak of the eruption. In No. 4 case are many points of extreme interest.

ON CERTAIN UNUSUAL FORMS OF VESICULAR ERUPTION : By J. L. MILTON, Surgeon to St. John's Hospital for Diseases of the Skin.

AS the peculiarities of any class of cutaneous affections are perhaps best studied when the cases are grouped together, the view being thus less distracted and the mind more free to follow the track of pathology, I venture to call attention to some peculiarities of herpetic diseases.

HERPES CIRCINATUS BULLOSUS.—Jane S., 45 years of age, a well-made, healthy-looking woman, applied, March 15, 1867, as out-patient at St. John's Hospital, suffering under the following symptoms: Nearly the whole surface of the inner part of the right arm and forearm, and a somewhat less, but still very considerable extent of the left arm and forearm were covered with vivid red, very slightly elevated patches, varying in size from that of a bean to that of the base of a split walnut. On most of these patches were vesicles about the size of a small pea, very rarely solitary, and generally in groups of two to four. They were mostly prominent and pointed in shape, but some were oblong, with the ends apparently communicating. They were in all stages, some quite tense from accumulation of limpid serum; others just rising. She tells me that she noticed none of the vesicles before the previous day, though the patches had formed a day or two prior to this. Her face had a peculiarly distressed look, and she complained of utter sleeplessness, occasioned by intense itching, smarting, and heat. She has been pregnant about four months.

As she also complained of being very constipated and feverish, a saline aperient was ordered, with an aperient and sedative pill, so as to procure her some rest if possible; a lotion containing liquor plumbi diacetatis and camphor mixture was directed to be freely applied. She was enjoined to puncture each vesicle as soon as possible, to keep very quiet, have a light, warm diet, with a glass of wine daily, and to leave off beer.

When seen on the 19th, there were rather fewer vesicles, otherwise there was no particular change: the patches had somewhat increased in size, and new ones were coming out. She felt no better, and was still very constipated. The dose of the aperient was accordingly augmented a little.

But a week later, the 26th, the complaint had gained ground in a very decided manner. There were now at least fifty patches on the right arm, all bearing vesicles varying

in size from a pea to a haricot bean ; some were also coming out on the outside of the arm which had hitherto remained free. On the inside of this arm, about halfway between the axilla and elbow, were two parallel lines of tolerably large bullæ and vesicles, mixed together and sixteen in number, and between these again and the elbow there was a patch as large as the palm of the hand, containing between fifty and sixty vesicles. On the left arm also there were now large numbers of vesicles, some of them assuming a whiter look than on the opposite side.

At her next visit, 29th, there were fewer vesicles, but the number of bullæ had increased, there being now quite fifteen to twenty on each arm, fully formed, and great numbers rising ; in fact, it seemed as if every part on which vesicles had not yet formed would be invaded. The fluid was no longer limpid, as at first, but white in some and yellow in others. The front part and sides of the abdomen and the inside of the thighs were by this time almost covered with the same red patches, but no vesicles had as yet formed upon them. Her bowels had been freely acted upon, and she now complained of being so cold that she shivered all day, and felt as if nothing would make her warm. She was, therefore, ordered eight minims three times a day of an acid solution of iron used at the hospital, and the free use of zinc ointment to the affected parts, as she thought the lotion rather irritated them.

From this time she got worse, and the day after, a visit to a photographer to have a portrait taken of the eruption, so completely prostrated her that she was obliged to take to her bed. I visited her on the 1st of April, and found the tongue red and chapped, pulse 120, great prostration both of mind and body, total loss of appetite, utter sleeplessness, and the most distressing irritability of the parts affected ; that is to say, of almost all the surface of the frame except the back, face, and hairy scalp. She was ordered a quart bottle of stout daily, with at least one or two glasses of port wine, rum and milk at night, and beef-tea *ad libitum*, as she could not touch solid food now. The steel, having obviously done no good, was given up, and sesquicarbonate of ammonia prescribed instead, ten grains every three hours in one ounce of infusion of cascarrilla. She could not bear *even zinc ointment*, and I therefore directed that she should be covered from head to foot with linen rags dipped in fresh-melted suet.

Two days later the pulse had fallen to 108, the tongue was less red, and there were fewer vesicles ; the prostration was still excessive, her bowels were obstinately confined, and she

thought the ammonia gave her pain. The aromatic spirit was accordingly substituted for the sesquicarbonate, and a stronger aperient pill prescribed, to be followed by the citrate of magnesia. By the 8th vesication had pretty well ceased, and she was so much better that I advised her to go into the country for a week, which she did shortly afterwards with considerable benefit. Her pulse had already fallen to 96, her appetite was somewhat restored, she had been able to get a little sleep, and the irritation in the skin had greatly lessened. On her return to town I carefully re-examined her. She was covered from head to foot with the erythematous patches, but the vesication had ceased some time. She was again ordered steel, and for some time seemed to improve under it; but this was of very short duration, the feeling of languor and irritability again assailed her, and from this time up to the date of her confinement never left her. No more vesicles formed, and only a few very small pustules, but the patches continued to increase in size and number from the beginning of May onwards.

About the end of the first week in June she noticed a slight show, which gradually increased, and on the Saturday following premature labour took place. The foetus, which was more than six months old, had, according to the statement of the medical gentleman who attended her, been dead some time. Directly after her confinement the eruption began to relapse, and by the third day she had a tolerable crop of large vesicles on each arm, while many of the spots on the legs and trunk became speedily covered with dry yellow crusts. But these soon abated again, and by the 25th of June she was almost entirely free from them, and at the beginning of July she had had no relapse.

Though a very intelligent woman, she committed the singular mistake of repeatedly telling me that this was the fourth time she had suffered in this manner, and always during pregnancy; but when she came to put the dates on paper she found there were only two previous attacks; the first having occurred in 1853, the second in 1860; there being thus an interval of seven years between each. There were three confinements between the eruption in 1853 and that in 1860, and two between the latter and the present attack, so that the entries stand thus:—

William S.	...	...	First eruption (1)	...	...	1853.
Still-born child	...	...	No eruption	...	...	1854.
John S.	...	...	No eruption	...	...	1855.
Henry S.	...	...	No eruption	...	...	1858.
Still-born	...	...	Second eruption (2)	...	...	1860.

Louisa S.	...	...	No eruption	...	...	...	1861.
Anne S. ...	...	...	No eruption	...	...	...	1863.
Still-born	...	...	Third eruption (3)...	...	...	...	1867.

All three, she asserts, began about the same time after impregnation, ran the same course, and invaded the same parts in succession. The second attack, however, was more severe than the first, and the present one is more severe than the second. Like the present, the previous outbreaks scarcely seemed to be in any degree influenced by treatment. They both disappeared spontaneously after parturition. I questioned the patient about everything that seemed in the least degree likely to throw any light upon the subject, but could make nothing out.

The complaint was new to me, but Mr. Erasmus Wilson mentions* having twice seen it associated with pregnancy, with which, indeed, it both began and ended. In one case the disorder had accompanied this state four or five times, in the other six times. The disease proved very serious in the first case, as it did in mine. In both Mr. Wilson's cases there was intense itching; the bullæ were flat, and accompanied by thin crusts, moist excoriations, and papulæ; and in both there was sympathetic disturbance of the stomach, with duskiness and cachexia of the skin. I did not notice the two latter symptoms: indeed the patient, a comely woman, looked as if, but for the eruption, she would have been a model of good health; and in the notes taken at the time I find it expressly stated that there were no crusts and no weeping from the surface at any stage of the complaint,—perhaps in some degree, results of the very free use of the liquor plumbi.

From the very outset I had expressed a decided opinion as to the inefficacy of any treatment whatever, and certainly I never observed that the medicines prescribed exerted the least real control over the progress of the complaint. The sedatives relieved the pain and sleeplessness to a certain extent, and she appeared to be benefited both bodily and mentally by the employment of purgatives, but these remedies exerted no visible influence, at least, over the course of any stage of the eruption. She expressed herself as very grateful for the comfort afforded by the use of the suet, which she believes carried her through her illness. Possibly some of the numerous prescriptions in vogue for itching might have quelled this troublesome symptom, but my experience of them has been so unsatisfactory that I did not make the attempt. The cure of the itching is the cure of the disease; and when we cannot cure the disease, I am afraid our control over the itching will

* "Diseases of the Skin," sixth edition, p. 294.

always be very limited, if, indeed, we can in any degree assuage it.

OBSTINATE HERPES OF THE FACE.—George A., an intelligent young lad, a cabin-boy in a river steamer, came under my care for an obstinate vesicular disease of the face, which gave him a most singular, and at times rather revolting appearance, though but for this he would have been healthy-looking. On the ears were several hard, brown, tenacious scabs, while from ear to ear stretched a broad irregular band of scattered vesicles, and cicatrices. This band was only about an inch broad where it crossed the bridge of the nose, but further back it extended down to the angle of the jaw; the upper margin lay just below the eye. The pits were superficial, and might, on a cursory inspection, have been taken for those of small-pox. There were not very many vesicles, and they were tolerably uniform as to size, being generally as large as split peas. They were in all stages, some perfectly clear; some having concreted into the firm brown scabs just spoken of.

The history of the case, as given by the lad's mother, is, that about six years and three months previous to this he suffered from typhus fever, and very soon after the vesicles began to appear on his cheeks; from which time to the present he has never been free from them. Not long after they also showed themselves on the lips, and he was then taken to a surgeon, who seems to have applied the nitrate of silver very freely to them. The remedy, whatever it was, did its work effectually; it gave great pain, but the disease has never reappeared in the part. It, however, soon after began to attack the ears, and there it has abode to the present date—quite six years and a quarter, one year and a half of which he passed at school, and the remainder in his present occupation.

The attacks are always preceded by stiffness, burning, and itching of the skin, and then the vesicles break out. The vesicles vary in number from eight or ten to twenty or thirty; except in respect to the pitting, they run the usual course of vesicles, becoming opaque, rupturing, or drying up, but always forming hard scabs. They are all flat and some are umbilicated. They are not followed by any weeping surface, nor do any soft crusts form. There are no pustules, in the proper sense of the term. During the six months that I have watched the case, a fortnight has never elapsed without some vesicles appearing, and generally a distinct relapse. The boy's health is, with this exception, excellent; he has no bad habits that I can make out, seems well fed and cleanly, and as he suffered from the affection for quite a year and a half before he left school, it cannot be laid at the door of his occupation.

He was treated with salines and mild aperients, with the free use of fresh-made oxide of zinc ointment to the spots, a lotion of liquor plumbi and camphor mixture being substituted in the daytime when the heat and itching come on. After this the nitric acid was given in infusion of quassia, but as no good resulted from a fair trial of this medicine, arsenic was prescribed instead. But at the end of several weeks no ground whatever had been gained, and the acid solution of iron, used at the hospital instead of the tincture of the sesquichloride, was substituted. He took it for a month, and during this time he had two bad relapses. It was therefore given up, and the sulphate of iron in mixture ordered. This he has now taken for four weeks, along with an eighth of a grain of bichloride of mercury daily, and upon the whole he is better. The disease is confined to the ears, and for three weeks he has not had a fresh attack—the *first time he can ever recollect having had so long an immunity*.

I never saw but one case approaching this in obstinacy. The patient was a chemist, was of a most irritable temperament, and had suffered from herpes of the face for eighteen months. Here, however, the disease speedily yielded to moderately large doses of tincture of steel.

VESICULAR ECTHYMA.—A gentleman, aged 35, living in the country, placed himself under my care rather more than two years ago, for disease of the skin affecting the left leg. Nearly the whole surface, particularly in front, from below the knee to the ankle, was one mass of large papules, vesicles, firm hard scabs, and cicatrices. The papules were dark red, very irregularly shaped, varying in size from a quarter of an inch to an inch and a half in their longest diameter, and raised in some places a line or two above the level of the skin. On some of the very smallest of these vesicles were seen in process of formation, and on one was a fully formed vesicle, or rather a small bulla. On other papulæ were seated small, clean, deep excavations, which looked as if they had been scooped out of the true skin; from these an almost colourless serum was discharged in great abundance, saturating any dressings in a very short time; in fact it poured out almost worse than from an eczematous surface. On still older papules these ulcers had become covered with hard, tenacious, brown scabs, while last of all, the oldest had given way to deep puckered cicatrices.

The disease had existed several months, and so far had resisted all treatment. Finding it so obstinate the patient tried to cure it himself, but the result was equally unsatisfactory. However, it soon yielded to the use of steel; the tincture

in full doses, three times a day, was ordered, and as a necessary accompaniment, a mild aperient pill two or three times a week; the sore to be dressed with a weak ointment of nitric oxide of mercury. Improvement began almost directly, and went on unchecked; the same treatment was continued till all the ulcers had healed, and vesicles had ceased to appear. I then advised the patient to go through a short course of arsenic, but he would not, and perhaps was as well without it, as quite two years after, he had had no return of his malady.

This disease does not correspond with ordinary vesicular or bullous affections; the irregular thickening, elevation and hardening of the base, and its disproportionate size, entirely remove it from that category. In fact, it was more like ecthyma, but not ecthyma as described generally; the vesicles were not seated on conical elevations, there were no pustules, nor did the vesicles become either purulent or tinged with blood. The complaint did not occur in a broken-down constitution, but in a healthy ruddy-looking countryman, very strongly built, living a regular life, a great deal out of doors, and residing in a wild, open district. There was no history of syphilis, no reason to suspect it, before or afterwards. The complaint, too, yielded to remedies which possess no control over syphilis in any stage. There was also no history of scabies or indeed of any other affection of the skin, and the only rank to which I can refer it is a vesicular form of ecthyma. I have seen and taken notes of two other cases, but none so well marked as this.

ICHTHYOSIS; ITS EARLY RECORDS. BY MARRIS
WILSON, M.D. London.

THERE is reason for supposing that the Arabian physicians were acquainted with certain forms of horny excrescences, arising as morbid conditions of the skin, and spread more or less extensively over its surface. But they do not appear to have subjected this knowledge to any method of classification. No description occurs in their works applicable to the designation *Ichthyosis*. All that they knew was evidently confined to separate observations. It is manifest, however, that this term was employed to distinguish certain squamous diseases of the skin previously to the time of Plenck, but still its use must have been of modern origin.

M. Janin de Saint Just, in 1818, commences a paper on Ichthyosis by saying "it is one of the maladies least well observed up to the present day; the books of practical medicine and of pathology have made no mention of it. It is a veritable lacuna that we remark with regret in the nosologies of Cullen, of Pinel, and of other modern writers. M. Alibert is the only one who has made it known in France, in his magnificent work, "*Traité des Maladies de la Peau.*" M. Fabre, in "*Bibliothèque de Médecin Practicien*, 1848," writes, "M. Alibert was the first who gave the name of Ichthyosis to a disease characterized by a squamous state of the epidermis, which gives to the skin of those who are affected by it an aspect analogous to the scaly skin of reptiles or of fishes." So many writers have adopted and repeated this opinion, that it has come to be generally received for a fact. M. Alibert himself by no means implies this, but his statement has been thoroughly misunderstood. He says, "I describe under the name of Ichthyosis, maladies in which the tegumentary apparatus is covered with scales, dry and white, which appear superimposed, one on the border of the others, like the scales of fishes." But he never meant, in presence of the classification of his predecessors, Plenck and Willan, that he first used the term Ichthyosis. Indeed, his own definition fully carries out this latter assertion. After having carefully studied the cases of John and Richard Lambert, who appeared in Paris in 1805, he says, as a consequence of their conditon "they have given more extension to the denomination of Ichthyosis, in permitting it to be applied to different degenerations of the epidermis, which have occasioned much surprise to observers." By the aid of these cases he was enabled to add a new species to the genus Ichthyosis.

M. Alibert divides the disease into three genera; Ichthyosis nitida, Ichthyosis cornea,—“this form is characterized by black hard scales, having absolutely the hardness of horn; these are sometimes flat or conical, very numerous, and placed side by side; at other times isolated, cylindrical, elongated, and twisted like the horns of oxen,”—and Ichthyosis pellagra.

Ichthyosis cornea is again subdivided into the species Ichthyosis cornea spinosa, Ichthyosis cornea unguulosa, and Ichthyosis cornea arietina. The first of these species appears to have been the cause of the mistake mentioned above; it is thus described:—"This variety is extremely rare, since there has been but one single example in the annals of art. It is that which we have seen occasion to observe in France lately, and which was first shown in England." This is in reference to the cases I intend describing hereafter, those recorded by Mr. John Machin, and by Mr. Henry Baker, in the "*Philosophical*

Transactions," but which will have to yield in priority of place to at least one other case mentioned in the same Transactions. M. Alibert appears to have been so impressed by the strangeness and rarity of the disease, that he thus expresses himself:—"I do not know if a phenomenon so extraordinary (*prodigieux* is the word used) will ever appear again in the course of ages, and if my readers of the future will be able to verify for themselves the truth of the picture which I present to them."

Let me turn now to what M. Alibert must have known of previous classification, and I do this simply to show that Ichthyosis was by no means a new term, and not in any way to detract from the ability which for the first time brought the *porcupine* disease into classification.

Plenck, "*De Morbis Cutaneis*," printed in Italian, in 1776, thus defines the "*Ictiosi*." "In this disease different portions of the body are covered with dry and white scales successively, one over the other, in the same order and manner as the scales of fishes stand one over the other."

In Willan's classification, 1798:—Ordo 2, *Squamæ*; "a lamina of morbid cuticle, hard, thickened, whitish and opaque. Scales have at first the figure and extent of the cuticular lozenges, but they afterwards often increase into irregular layers, denominated crusts."

The genera of this order are arranged as *lepra*, *psoriasis*, *pityriasis*, *ichthyosis* or fish-skin disease. It must be admitted that these classifications were not of a very satisfactory character. There was the order *Squama*, and the genus *Ichthyosis*, but M. Alibert saw the necessity of a more complete definition, and following the guidance of his own researches, he chose form as a distinguishing characteristic of the disease, and named it *Ichthyosis cornea spinosa*. He stopped short of a far more perfect description, and one which Mr. Erasmus Wilson has so correctly adapted in the term of *Ichthyosis sebacea*, in contradistinction to its congener, *Ichthyosis epidermidis*.

I must now turn back to older times, and ascertain what careful observation had been doing.

In the "*Philosophical Transactions*," vol. 14, is published the translation of a letter from A. Leeuwenhoek, of Delft, dated December 28th, 1683.

"There has been carried through this land to be showed a child about ten years old, whose body (as they said) was all covered with *fish scales*. Having heard very much of this wonder, I went to see it, but found it much different from the report of it. For there appeared to my naked eye and microscope no part of the body which I could say was covered with

fish scales, but rather with a thick *callus*, and more especially within the hands and under the feet; upon some parts of the body also there were excrescences like ridges of *warts*.

I desired of those that took care of the child that I might have one of the particles or scales plucked from the body, but they refused me, under pretence that the blood would follow it; when I looked earnestly upon the child, I perceived they were displeased with me. They told me that the scales fell off four times a year, and others grew in their places; and that daily some of the scales were left in the bed, but they still refused to give me or sell me any of them. At length, in searching carefully about the room, I found a cluster, which my repeated observations do confirm to be nothing but natural and ordinary scales, such as bodies use to be covered with. I afterwards put it in water, and let it lie some hours, till the parts would separate with the least touch, into a thousand small scales. These were more than ordinarily beset with globules, and thereby were very like the scales of the brawn of the inside of the hand. But not otherwise remarkable."

The above paper contained all that related directly to the description of the case, but it was not by any means the whole, nor, indeed, the most interesting portion of Leeuwenhoek's letter, addressed to the Royal Society in Latin; for the latter portion expressed his opinions of the condition, and scarcely recognized it at all as a state of disease, but rather as one of sedulously preserved foulness. The Secretary of the Society, for some unexpressed reason, would seem to have desired to suppress those sceptical opinions; possibly he did not agree with them. I shall, however, take the opportunity of transcribing them.

In continuation he says:—"The cause of these scales I believe to have been that the boy was never cleansed from early childhood, and now his body is so covered with some sort of preparation that the scales which otherwise would fall are agglutinated to it, and moreover, anointed by some blackish material, so that not only he may appear more terrible to look at, but also that his movements may be as slow as possible. For when I examined his nates, I found there few or none of those particles which they call scales, and with which the rest of his body was covered. The reason of this I believe to be that, where the boy sits upon his haunches, this agglutination of scales cannot be made, or even they may be rubbed off. And I am convinced if this boy were well washed with hot water and soap, all these imaginary scales, by which the common people are deceived, would fall off in a very few hours."

This description of the disease raises no doubt as to its faithfulness, but a certain bias apparently directs the explanation of its nature, which I think may be accounted for. Leeuwenhoek was apt to estimate phenomena according to his own theoretical views, and if the facts did not, as they would not always, quite coincide with his theories, he did not hesitate to bend them a little in the desired direction; and this I feel confident he did in the present instance. The microscopic observation of epidermic scales was then engaging much of his attention, and it was but natural to his custom to discover an abundant supply of scales in the substance that he had obtained, to the exclusion of the much larger proportion of sebaceous matter composing it. The recognition of this latter secretion might possibly have enabled him to arrive at a more just conclusion as to its origin.

From the foregoing remarks I conclude that no kind of classification of skin diseases then existed, in which these conditions could be included; otherwise so shrewd an observer as Leeuwenhoek would surely have referred this remarkable and distinctive case, at least to an order, Squama, if not to a genus, Ichthyosis.

It is a curious circumstance that the first recorded case of this disease, like some of more recent date, would appear to have been brought under scientific notice, through having been used as a means of pecuniary profit.

Forty-eight years later, and eight years after the death of Leeuwenhoek, there appeared in the "Philosophical Transactions" for the year 1731 a description of "an uncommon case of distempered skin," extracted from the minutes of the Royal Society. This account is given by John Machin, Secretary of the Royal Society, and Gresham Professor of Astronomy:—

"A country labourer living not far from Euston Hall, in Suffolk, showed a boy (his son) about 14 years of age, having a cuticular distemper of a different kind from any hitherto mentioned in the histories of disease. His skin, if it might be so called, seemed rather like a dusky-coloured thick case, exactly fitting every part of his body, made of a rugged bark or hide, with bristles in some places; which case—covering the whole body, excepting the face, the palms of the hands, and the soles of the feet—caused an appearance as if those parts alone were naked and the rest cloathed. It did not bleed when cut or scarified, being callous and insensible. It was said, he sheds it once every year, about autumn, at which time it usually grows to the thickness of three-quarters of an inch, and then is thrust off by the new skin which is coming up underneath. It was

not easy to think of any sort of skin, or natural integument, that exactly resembled it. Some compared it to the bark of a tree; others thought it looked like seal skin; others like the hide of the elephant, or the skin about the legs of the rhinoceros; and some took it to be like a great wart or number of warts uniting and overspreading the whole body. The bristly parts, which were chiefly about the belly and flanks, looked and rustled like the bristles or quills of a hedgehog shorn off within an inch of the skin.

His face was well-featured and of a good complexion, if not rather too ruddy; and the palms of his hands were not harder or in worse condition than is usual for workmen or labourers. His size was proper for his age. His body and limbs were straight and, excepting as to this deformity, well shapen.

This rugged covering gave him no pain or uneasiness, unless that sometimes after hard work it was apt to start and cleave and cause a bleeding; and notwithstanding the usual disposition of his humours to form so strange an integument, his natural excretions were said to be in the ordinary course and manner, without anything remarkable attending them.

The father knew of no accident to account for this distempered habit; but said that his skin was clear at his birth, as in other children, and so continued for about seven or eight weeks, after which, without his being sick, it began to turn yellow, as if it had had the jaundice; from which, by degrees it changed black, and in a little time afterwards thickened and grew into that state it appeared in at present. That he has been in health from his birth, and hath no sickness at the season when he sheds it. He further said that his mother had received no fright to his knowledge whilst she was with child; and hath borne him many other children, none of which have ever had this or any other unusual distemper or deformity."

It is a very odd circumstance that Mr. Machin hazards no opinion as to the seat or origin of this disease in the text; but in referring to the engraving he says, "Fig. 2 represents a portion of this extraordinary epidermis, *which was probably a prolongation of the nervous papillæ*, grown to about the size of common twine packthread; and these, standing as close together as the bristles in a brush, seemed like them to be all shorn off even and of the same length, viz, about half an inch above the skin."

I have entered fully into the details of this case, because of the strong interest attaching to it, this being the first of the Lambert line in whom the disease is recorded to have appeared. The subject of the paper was Edward Lambert, grandfather of the brothers John and Richard Lambert, on the study of whose

cases M. Alibert founded his species *Ichthyosis cornea spinosa*.

In 1735, Abraham Vater, of Wittenberg, sent a letter in Latin to the Royal Society, entitled, "*Affectus Cutaneus Singularis*," giving a concise sketch of the case above detailed by Mr. Machin, and going on to say that he had just received the history of a girl 12 years of age, then living. "For some years she had laboured under swelling of the joints and of the whole body, to cure which various domestic and empirical remedies were prescribed without success. A hard peculiar tumour then appeared on the back, between the scapular bones.

"From that time a dry hard crust began to be formed, at first on the palms and soles of the hands and feet, which stood out so prominently from the apices of the fingers and toes, that it hindered prehension and progression, and the girl could neither stand nor walk, but was necessarily carried, or drawn in a carriage. This crust fell off at intervals, particularly after various inunctions applied by the parents, but the girl became ill from that time, the tumefaction began again, discomfort and pain in the bowels came on, which did not cease until the crust was reproduced. When this happened, no further inconvenience was experienced, except that it took away the use of the hands and feet. After about twelve months this poor creature was placed under the care of a surgeon, who treated her with mercurial aperients, and decoctions for purifying the blood, under which the disease ceased, and the health of the skin was restored, so that the girl now appears to enjoy perfect health; but whether this will be constant in future, time will show. I have received a portion of this crust, with a fragment of the same fallen from the apex of a finger, of such a length and thickness, that it resembles the joint of a finger, more especially as on one side a portion of the nail is seen. Examined by the microscope, this crust appears manifestly to be composed of scales, and thus becomes a certain proof that it consists of nothing but cuticle, spread out and hardened with a viscid and tartareous supporting substance."

From the same authority, Vater received "the account of a young woman who for a long time had such a crust deposited twice a year upon her hands and feet, also upon her forearms, which did not derive any perceptible relief from remedies. This woman suffered from obstruction of the menses, which appeared to be the origin of the malady."

A paper was read at the Royal Society by Mr. Baker in 1755, entitled "*A Supplement to the Account of a Distempered Skin*," published in No. 424 of the "*Philosophical Transactions*." It

mentions that the boy spoken of in Mr. Machin's paper, now become a man, had lately been shown in London by the name of the Porcupine Man; that his name was Edward Lambert. He had had six children, all with the same rugged covering as himself, one alone of them however living, who is now eight years of age. Mr. Baker confirms this statement, and gives the same details as Mr. Machin, and finishes thus, "Only begging to observe that this covering seemed to me most nearly to resemble an innumerable company of warts of a dark-brown colour and of a cylindric form, rising to a like height, and growing as close as possible to one another, but so stiff and elastic, that when the hand is drawn over them they make a rustling noise." This boy of eight years of age was the future father of the brothers John and Richard Lambert, who furnished forth a study for M. Alibert.

A paper was published in the ninth volume of the "*Medico-Chirurgical Transactions*" for 1818, by Mr. P. J. Martin, entitled "*Case of Hereditary Ichthyosis.*"

"Jane Holden, aged three years, is the only child of a husbandry labourer. Her whole skin, except the face, is covered with small scales, or rather warty or bristle-like projections, varying in colour, from the lightest brown to the deepest black, and in some parts they have a yellowish tint, as if scorched by the fire. They vary in size and form in various parts of the body, but are mostly long and flat, and standing at right angles to the skin, except where, by the pressure of the clothes, they are made to assume an imbricate disposition. They are easily removed when they grow long, and are, in that way, constantly being exfoliated, and renewed in all parts of the body.

The child seems to suffer no uneasiness from this extraordinary state of the cuticle but a slight occasional itching, and is in other respects strong and healthy, except being liable to trifling boils about the head and neck, and now and then a slight psorophthalmy.

The disease began to make its appearance without any previous concomitant constitutional disorder, when she was three months old, beginning about the joints, and upon the soles of the feet. It commenced in the mother also about the same age. She was the offspring of healthy parents, and one of six children, none of whom but herself have any cutaneous disease. Her cuticle is nearly in the same state as the child's, except upon the neck and bosom, and forearms, where it is natural. Her fingers and palms are covered with a dense brown coat more like bark than scales, which very much impedes their motion, and the soles of her feet are in the same state. Her

legs are completely incased in thick scales, and at a distance might be mistaken for those of a negro. Upon the parts most liable to friction the scales are short and of a shining black, upon the legs they are broad and close, and upon the insteps they resemble black lumps or warts.

The child inherits the features of the father, who is a fine and handsome man; and there is no mental incapacity, either in it or its mother, although the countenance of the latter is rather fatuous, and certainly very revolting. It may be worthy of remark, too, that their teeth are in a state of great decay. The child has cut all its milk teeth, and they are all carious."

Mr. Martin, unable to account for the phenomena before him, was not content, however, to leave the case in the open field of observation, but sought a substitute for explanation by altogether ignoring the condition as a regular form of disease. He concludes thus:—"Cases like these are subjects of record rather as matters of curiosity than of practical utility, or as affording useful physiological deduction. Unless we are to infer that these appearances are to be classed along with many other incurable disorders, not as diseases, but as natural and inherent *labes* in the constitution."

I think this should not have been the line of argument used before the Medico-Chirurgical Society, even in the year 1818, when fully twenty years previously this very series of conditions had been so well described and classified by M. Alibert.

In terminating these early records of *Ichthyosis*, I cannot help contrasting with the present, the times to which they refer. The enlightened dermatologists of to-day see, in the extension of true classification, a clearer understanding of the causes of skin diseases; the more minutely those causes are examined, by so much are the opportunities offered for an advancement towards their relief. But, in proportion as the special conditions become more fully understood, so should greater efforts be made to modify the older terms, and substitute others more definite and appropriate, and more in accordance with the present vastly extended knowledge of pathology.

ON PRURIGO. BY HENRY PURDON, M.D., Physician Belfast Dispensary for Diseases of the Skin, Assistant Physician Belfast Charitable Infirmary, &c.

THE following three cases of Prurigo have been selected for the purpose of showing the value of the bromide of ammonium in this distressing complaint.

I.—Mrs. M., æt. 60, admitted at the Belfast Dispensary for Skin Diseases, in February, suffering from Prurigo, and which has existed for upwards of six years, is always worse at night. Formerly was in better circumstances, and attributes the disease to mental anxiety and bad food. At present (February) her arms and chest are excoriated, presenting all the typical appearances of Prurigo; the cuticle is also discoloured.

Various remedies were tried in this case, both locally and constitutionally, such as lotions containing hydrocyanic acid, borax, and morphia, the latter being administered by hypodermic injection, and from the use of which most benefit was derived, but no permanent results were obtained. At the end of February I determined to try the effect of the bromide of ammonium, commenced in doses of ten grains, three times a day, gradually increased to twenty; and discontinued all local treatment. After taking the bromide for about a fortnight the feeling of formication disappeared, the patient obtaining sleep at night. The diet consisted principally of farinaceous food and milk. At the present time (July) she is perfectly well.

II.—J. M., æt. 64, formerly a butler, admitted at the Dispensary for Skin Diseases, May 1st, suffering from Prurigo, which has existed for about two years; was formerly much given to drinking whisky, to which he attributes the present disease; appetite fair; occasionally sleeps well at night; bowels usually costive. In this case the treatment was commenced by administering a pill containing podophyllin, pil. colocynth co. and ext. of Indian hemp, every second night for about a week, so as to get the liver and bowels to act naturally, after which the bromide was commenced, continued steadily till June 29th, when he was discharged cured.

III.—H. S., æt. 59, admitted into the infirmary of the Belfast Charitable Society, under my care, on February 4th, suffering under a severe attack of Prurigo; has always been temperate, but is greatly debilitated; no appetite, and his mind wanders occasionally. An extensive eczematous eruption exists on his chest, arms, and back, arising from the

patient tearing and scratching himself to relieve the excessive itching. In this case quinine was prescribed, and a lotion of sulphate of zinc, glycerine, and water, as an external application, with twenty drops of liquor morphiæ hydrochloratis at night to procure sleep. In the month of March, as no benefit was derived from the above treatment, and from the success attending the administration of the bromide of ammonium in case I., I determined to commence its use, its effects being apparent in a few days, the patient expressing himself much better. The only local treatment adopted was the application of calomel ointment (a drachm to the ounce of lard), under the use of which the eczema disappeared, and, as the itching was greatly moderated, he did not feel the same inclination to tear himself. By the end of April the patient was quite well of the Prurigo, but several carbuncles made their appearance on his neck, some of which quickly suppurated. The treatment now adopted was, on the first appearance of the carbuncles, pressure, and when it was evident that suppuration must take place, a poultice for a few days, after which they were opened, a yeast poultice being then applied; at the same time a generous diet and wine was ordered.

The patient's constitution being evidently quickly breaking up, and as he made very little urine, and that high-coloured, I prescribed a stimulating diuretic, which treatment I believe is recommended by Dr. Day for Prurigo in his work on "Diseases of Advanced Life," but from which no benefit was derived. Considering his present complaint to be due to a blood poison, I ordered the bisulphite of soda in infusion of cinchona: this certainly prevented the appearance of any new carbuncles; but a large anthrax having already formed on his back, from this he rapidly sank.

The above case is, I think, interesting, but I shall leave it to those whose experience is more extensive than mine to show the connection between the two diseases. I shall only mention that I have frequently seen an eruption of furunculi make their appearance after Prurigo has been relieved. Could Prurigo depend on a blood poison? for this disease is often associated with jaundice, gout, rheumatism, and Bright's disease.

Since the above cases presented themselves I have treated several others with the bromide of ammonium with marked success. The only local application that I use is borax and glycerine, and that merely as a *placebo*. The bromide, when first administered, quickens the pulse, and when given in large doses is a powerful anodyne, occasioning sleep and increasing the secretion of urine.

According to Dr. A. T. Thompson, Prurigo frequently arises

from the abuse of fermented liquors, as also indigestible kinds of food, and is, I believe, now looked on as a neuralgia of the papillæ of the skin. Many dermatologists consider it to be evoked by heat, and when constitutionally recurrent is a form of eczema, to which the name *eczema papulatum* has been given. Dr. McCall Anderson considers Prurigo to be a form of lichen, and “consequently an eczema, the papules being identical with those of lichen, the black crusts being produced by scratching.” Pruritus of the anus frequently arises from engorgement of the liver and ascarides in the rectum.

Cazenave considered Prurigo to be a disease of sensibility, depending on the retention of some of the constituents of the urine in the blood. Pediculi often occasion the disease in old people, from the irritation of which the patients tear and scratch themselves, a papular eruption being produced. In conclusion, the following statistics of this disease may not be uninteresting:—

Town.	Number of Patients.	Number of cases of Prurigo.	Recorded by
London	1000	33	Mr. Milton, in “Modern Treatment of Skin Diseases.”
London	1000	13	Mr. Erasmus Wilson.
London	1016	11	Mr. Startin, “Appendix to Pharmacopœia.”
Belfast.....	1492	14	Dr. H. S. Purdon.
	4508	71	

EPHIDROSIS CRUENTA, OR BLOODY SWEAT; WITH
REMARKS. By DR. M'CALL ANDERSON, Lecturer on
Practice of Medicine in Anderson's University, Physician
to the Dispensary for Skin Diseases, &c., Glasgow.

ON the 5th of May, 1866, at the recommendation of Dr. J. Lindsay Mason, of Ayr, I was consulted with regard to a young lady, who, although hardly fifteen years of age, had the appearance of being a couple of years older. I am indebted to Dr. Mason's description of her case for many of the details which follow:—

Menstruation became fully established at the early age of

eight, and continued regularly until she was eleven years old, when it ceased entirely. At the age of thirteen it reappeared, and continued normally until the middle of February, 1865, when it again became irregular, and about this time Mr. Haldan, of Ayr, was requested to see her on account of "a large abrasion of the cuticle in the middle of the right cheek, suppurating in the centre, and inclining to bleed towards the circumference. This sore was exceedingly obstinate, refusing to yield to the constitutional and local treatment resorted to."

In the summer of this year she went to England, the sore being unhealed, and the menstruation very irregular. The cutaneous manifestations seem to have subsided in the month of October, coincident with which she began to menstruate regularly each month, the discharge on each occasion being profuse, and lasting about six days.

In March, 1866, Dr. Mason was requested to see her again, owing to a fresh outbreak of the eruption; and from about this time onwards until I saw her in May the menstruation was very irregular, that is to say, she menstruated for one day every week for four weeks, the discharge being, however, very scanty, after which a fortnight elapsed before the next menstrual flow, and then the weekly discharges reappeared again for other four weeks, and so on.

The only parts of the skin implicated from first to last were the face, arms, front of the chest and legs. When I saw her I was struck by the arrangement of the patches of eruption which were left in the sites of the hæmorrhagic attacks. One was on the brow, another on the chin, and one on each cheek. On the front of each arm also there were four in a row, two on each upper arm and two on each forearm. When the chest was the seat of the eruption, the patches also occurred in a row in front of the sternum. It will thus be observed that the symmetry of the patches was wonderfully perfect, pointing very conclusively to the constitutional origin of the complaint. The patches were oval or rounded; some of them resembled erythema, while others were covered with crusts due to the desiccation of serum, blood, or pus, and resembled eczema.

One of the most marked peculiarities of the hæmorrhage was the suddenness of its invasion. She sometimes exclaimed, "Oh, I feel another place on my face again," and *immediately* the hæmorrhage set in. One day, when Dr. Mason was dressing a patch of eruption on her face, she suddenly called out, "Oh, I feel a place on my arm." He at once turned up her sleeve, and sure enough a large oval patch, fully two inches in length and one in breadth, was detected on her left forearm.

Each outbreak was accompanied by a burning pain, and for some time after the development of a patch, especially when they were on the arms, the part was very sore, but never itchy. An oval or round red ring, varying from the size of a shilling to that of a crown, formed almost instantaneously, and the redness quickly spread inwards over the enclosed skin. As soon as seen, the patches appeared as if the cuticle had melted away, and the surface was quite wet. Sometimes the exudation was like water at first, and changed into blood; at other times, and especially on the face, the patches were at once covered with a complete dew of blood. The hæmorrhage did not, however, consist merely of the dew of blood: that was only at the outset: it was actual bleeding as from a cut, the blood sometimes streaming down the face or other part attacked.

Sometimes, instead of blood, there was only a serous discharge ending in suppuration. Those patches which bled most healed soonest, but before they healed (which generally took place within five or six days) both suppuration and hæmorrhage often occurred in the same place. In exceptional instances the parts did not heal for four weeks. This was especially observed on the chin. No trace of the previous eruption was left after it healed up, except on the right cheek, where suppuration was free and prolonged, and where a slight cicatrix is left, although not sufficient to cause deformity.

At first she had not the slightest warning that an outbreak was at hand, but at the later periods of her illness Dr. Mason "observed her lean her head upon her hands, and wear an almost anxious look; and on questioning her she said she felt rather giddy, and in a quarter of an hour or less another place would break out."

There was rarely more than one attack each day, although sometimes the hæmorrhage occurred from two separate portions of skin simultaneously. It is very curious to note, too, that the outbreak *generally* occurred at the same hour each day, namely at 11 a.m., but it did not seem to be under the influence of mental or bodily excitement, or to be induced by taking food or stimulants. Occasionally it occurred in the afternoon, and sometimes a day passed without an attack.

While still suffering from this complaint, she had a severe attack of whooping-cough, which seemed greatly to aggravate the patches on her face, causing them to bleed freely. At this time also she had frequent and copious Epistaxis, generally after a fit of coughing or retching, and this somewhat relieved the parts attacked.

This young lady is rather an excitable person, but her

general health was good, and the bloody discharge was not sufficiently profuse to weaken her.

She had been seen by a number of medical men, some of whom, at all events, regarded the ailment as being dependent upon debility, as was evidenced by the courses of cod-liver oil, steel, &c. which were administered; but Dr. Mason and I regarded it as one of vicarious menstruation.

The treatment which was accordingly adopted was the maintenance of free action of the bowels with aloes and iron pills, especially when there was any menstrual flow, at which times she sat for about an hour in a hot mustard hip-bath, and had a few leeches applied to the insides of the thighs.

Locally, when the hæmorrhages occurred, the parts were bathed with cold water, and afterwards dusted with powder of oxide of zinc. Dr. Mason also combined the administration of Fowler's solution, which she had been getting before I saw her, and which, at all events, did no harm; although I was rather opposed to it on theoretical grounds, as being apt to produce congestion of the skin, and to favour the outbreaks.

Within a fortnight of the commencement of the treatment directed against the disorder of menstruation, there was manifest improvement, and Dr. Mason reported that by the beginning of June the cutaneous manifestations had quite disappeared, and no traces of them were left except the slight scar previously referred to, and slight redness of the previously affected parts if she got overheated or excited. About this time, however, she had on one occasion a slight discharge of blood from the eyes. Her menstruation, although considerably improved, was not well established.

On the 27th October, 1866, Dr. Mason reported that she remained "quite free from her old and troublesome complaint," and that her menstruation was "pretty regular," though "not quite up to the mark;" and on the 19th of May, 1867, he reported, "The young lady is now quite well, and has been so since I wrote you last."

It is a well-known fact that discharges of blood from wounds, abrasions, and ulcers of the skin, especially in connection with menstruation, are by no means uncommon; indeed, innumerable examples are to be found scattered through the medical literature of this and other countries; but cases such as that which I have just related, in which the sanguineous flow is altogether independent of any pre-existing cutaneous lesion, are exceedingly rare. I may, therefore, be pardoned for referring briefly to those which I have found recorded, in the hope that they may serve still further to elucidate the subject under consideration.

Erasmus Wilson, in his valuable work "On Diseases of the Skin,"* reports two cases of vicarious menstruation very similar to my own, one being that of "a young lady, in whom a discharge of this nature took place every fortnight from four circular spots, each about the size of a half-crown, and situated symmetrically on the face; one being on each cheek, one on the forehead, and one on the chin."

He also quotes a very extraordinary case of a young woman of eighteen, who "suffered a loss of blood from 'her ears, a little after at the points of her fingers, and then at her toes; presently after, at the umbilicus and corner of the eye; several times by sweat; and at length it burst out from the middle of her breast; afterwards in the foot, where the saphena is pricked in bleeding; then at both palms and back of the hands. Two days after it flowed from her chin, and in the night-time from the tip of her tongue, and all this in a fortnight's time.' Whenever it flowed from her 'breast or other parts like sweat, there was no vestige of an orifice to be seen.'"

M. Brierre de Boismont, in his work on Menstruation,† quotes the following case from the "*Médecine Pratique*" of Pinel:—"Miss A. had been subject to attacks of hysteria from the age of eleven, which were followed by vomiting of blood. She menstruated at fourteen; her health was re-established, and the catamenia continued to flow regularly for several months. A sudden fright suppressed the menses, and again hysteria came on. Vicarious menstruation now occurred. The legs swelled and were covered with vesicles, and during six months blood was regularly discharged from them. The left arm swelled and the legs recovered, and for a year there was a regular sanguineous discharge from the arm. A third deviation occurred from the left hand, which had been slightly wounded. The 'menses' flowed from this opening for six months. In the fourth year two wounds were formed on the face, from an attack of erysipelas; one upon the side of the nose, the other on the upper eyelid. For two years the periodic discharge took place from these openings, and it no longer occurred from the thumb. The abdomen, in its turn, was attacked with erysipelas, and for five months regularly there was a discharge from the navel at each menstrual period. For four months the discharge proceeded from the inner ankle of the left foot; for two months from the left ear; for three

* Sixth edition, p. 821. London: Churchill.

† "De la Menstruation considérée dans les rapports Physiologiques et Pathologiques." Paris. 1842.

from the left nipple. When the discharge did not flow from any one part, bleedings at the nose and vomitings of blood, preceded by convulsions, pains in the head, and giddiness took place. After remaining some time at the Salpêtrière, the health of this young female improved, and regular menstruation was established."

In the *Lancet* for 2nd March, 1861, a very curious case, which came under his care, is related by Dr. T. K. Chambers, of which the following are the most salient points.

The patient was a young woman, the subject of suppressed menstruation, who "constantly suffered from want of appetite, cough, pains in the chest, and a feeling of debility," although her appearance was that of robust health, and who, at the age of twenty-three, became the subject of a cutaneous eruption on the face, the development of which is thus described: "She feels first a peculiar soreness and tenderness of an isolated spot, which enables her to predict that in the course of a few hours an eruption is going to commence. The first appearance of this is an erythematous blush, sometimes slightly raised above the surrounding surface, but not so much as in erysipelas. After an uncertain time, seldom more than a few hours, there may be detected a scattered crop of fine vesicles, like sudamina, mixed with a fine serous dew, uncovered by any pellicle. This never lasts long enough to form colourless drops, for quickly it becomes bloodstained, and then little points of blood are seen oozing out, sometimes so slowly as to dry and form a scab, sometimes collecting into great thick gouts, and trickling in a ghastly way down her face." If left alone to dry into a scab, the bleeding "stops in a week or ten days, usually, however, to be succeeded, before it is quite recovered, by a similar eruption in another place. Sometimes, at irregular periods, there was an interval of a week or a fortnight; sometimes the cutaneous phenomena were replaced by bleeding from the nose, sometimes by vomiting of blood, but never by hæmorrhage from either lungs or bowels. These symptoms continued nine months, and were relieved by anticipating the eruption of blood, with leeches applied to the spot where it was expected. The discharge became serous, then was like little blisters, and finally ceased when her health was re-established by the sea air of Margate."

In September, 1860, that is, four years from the commencement of the first attack, she was admitted into St. Mary's Hospital with similar symptoms; but on this occasion the face was not attacked. "When she lies down much in the day," writes Dr. Chambers, "that, indeed, is almost always the

locality where it has appeared; but when she is about, the legs and thighs have exhibited like appearances; both fore-arms, too, and once the chest, were attacked." The fluid exuded "contained blood discs, . . . much granular matter, dark fatty-looking specks, and scales of epidermis." Blood drawn from a prick in the finger looked perfectly natural. On two occasions she threw up from the stomach about half a pint of dark brownish-purple sanguineous fluid, and occasionally her pocket-handkerchief was stained with blood reported to have come from the nose.

"She was bled three times," writes Dr. Chambers, "and after each bleeding successively, there was a decided improvement in the quantity and quality of the eruption. Four times there were leeches applied to the groins, but I could not trace any benefit to that. But when leeches were applied to the spots affected, they certainly arrested the hæmorrhage at that spot, and diminished its future violence elsewhere. She had leeches applied in this way, to one place after another, thirteen times during the month of December, making seventy leeches in all, in addition to twenty-four ounces of blood taken by venesection. Yet, though blood-letting has been thus freely employed in the way most calculated to cause debility, namely, in small and repeated quantities, she has gained power and vigour, got less hysterical, and improved in every way, at the same time that her cutaneous hæmorrhage has been gradually diminishing. For a few days, while convalescing, she had a spontaneous diarrhœa."

Contemporaneously with blood-letting, aloes and oleum sabinæ, in various doses, were employed, and consequent upon that treatment, about five weeks before she left the hospital, the catamenia occurred once, and flowed for five days. No immediate lessening of the cutaneous hæmorrhage followed the establishment of the uterine function; it had begun to improve before, and continued to improve after it, so that by the beginning of February, 1861, it had ceased altogether.*

Chambers cites two cases from the "*Archives Générales de*

* In a letter dated 29th July, 1867, Dr. Chambers writes me as follows:—"Shortly before my illness in the spring of '64, I saw the young woman She had experienced occasional attacks of hæmorrhage from the skin during the interval since I last saw her, but could always keep them off if she could get some leeches at the right time. She came then to ask for some leeches, for which I gave her a sort of general order. She distinctly said that she always found herself stronger after artificial loss of blood. I observed in her one thing which I did not I think notice in the lecture, namely, a peculiar livid injection of the conjunctivæ, before the skin became affected.

Médecine," 1829 (t. xix. pp. 112 and 113); one of a young lady who, after ten years' suppression menstruated for three years through a vesicular eruption in one finger; and the other of a prostitute, in whom the discharge occurred through spots of the size of a five-franc piece, which appeared from time to time one after another on the breast, in the axilla, on the back, the buttocks, and the epigastrium. "The description of this case," writes Dr. Chambers, "accords closely with that of our patient, especially in the eruption being less periodical and more continuous than happens in most vicarious menstruations. The uterus also was healthy, for she became pregnant and bore a child."

Chambers also quotes from Heusinger* the case of a woman who had diseased ovaries and recto-vesico-vaginal fistulæ, in whom, although the catamenia sometimes appeared at the proper place, they were generally arrested there, and appeared in a variety of parts of the external skin, but especially on the face. She had suffered five years, was very hysterical, and had been in several hospitals.

Besides the above, cases have been related by A. Finol,† Schilling,‡ Lenhossék,§ Voigtel,|| Van Swieten,¶ and others; but space will not permit my alluding to them further.

It must not be supposed that all cases of Hæmidrosis are connected with derangements of menstruation. That such a conclusion is erroneous is proved from the fact that it has been observed in adult males and in infants. Thus Hebra** tells us "of a young man, strong and well-nourished, who was attacked repeatedly by hæmorrhage from the surface of the lower limbs. This generally occurred during the night, so that he first became aware that the bleeding had taken place by finding the sheets stained with spots of blood when he awoke. "I once, however," continues Hebra, "saw blood flow from the injured back of the hand of this patient while he was sitting near me at table. The blood formed a jet, which would about correspond in size to the duct of a sweat-gland.

* "Schmidt's Jahrbuch." 1836.

† "Observation d'une Dégénération telle que le sang transsúdoit par la peau"; Sédillot, "Recueil périodique de la Soc. de Méd. de Paris," xix. p. 71.

‡ "De Sudore Sanguineo, post graves convulsivos et spasmodicos affectus erumpente, feliciter tandem sublato"; "Acta Acad. Nat. Cur.," vol. iii. p. 425.

§ "Physiologia Medicinalis," vol. iii. p. 352.

|| "Stark's General Pathology," p. 1131.

¶ "Commentaries on Boerhaave," sec. 1286.

** "On Diseases of the Skin." By Ferdinand Hebra, M.D. Translated and edited by C. Hilton Fagge, M.D. The New Sydenham Society. London, 1866.

This jet had also a somewhat spiral form, and rose about 1''' above the surface of the skin."

Beneventus, too, has recorded the case of a man who discharged blood once a month from his right side.* And M. du Gard† has described a case, quoted by Erasmus Wilson‡—of a child three months old that was "taken with a bleeding at the nose and ears, and in the hinder part of the head, which lasted for three days, and afterwards the nose and ears ceased bleeding, but still blood like sweat came from the head. Three days before the death of the child, which happened the sixth day after it began to bleed, the blood came very violently from its head, and streamed out to some distance. It also bled on the shoulders and at the waist;" "it bled also for three days at the toes, at the bend of its arms, at the point of the fingers, and at the fingers' ends."

From a study of the recorded cases of *Ephidrosis Cruenta*,—a title by the way which was given to the disease by Dr. Mason Good, but which is singularly inappropriate, for the discharge is a hæmorrhage and not a perspiration tinged with blood as some have supposed—the following conclusions may be drawn:—

1. Discharges of blood from the skin, apart from wounds, abrasions, ulcers, and the like, are exceedingly rare.

2. In some cases such discharges are preceded by the development of oval or round patches of erythematous inflammation; in others by the eruption of crops of vesicles, such as I once saw in an instance of milky (white fibro-serous) discharge from the leg; while in a third class of cases the hæmorrhage comes from the follicles without any intervening eruption.

3. The disease occurs most frequently in females, and in connection with Amenorrhœa or defective menstruation, being in fact a species of vicarious menstruation.

4. That such is its invariable pathology, however, is disproved by the fact that it has been known to occur in infants and in adult males.

5. That the treatment by means of nourishing diet, stimulants, and tonics, on the supposition that the discharge is due to debility and deterioration of the blood, is unsuitable in the majority of cases.

* "Van Swieten's Commentary on Boerhaave," vol. xiii. sec. 1286.

† "Medical Essays, abridged from the Philosophical Transactions," vol. i. p. 52.

‡ "On Diseases of the Skin." By Erasmus Wilson, F.R.S. Ed. vi., p. 820. London: Churchill.

6. That, on the other hand, an opposite line of treatment, and especially the abstraction of blood, local or general, or both, is much more likely to prove serviceable, and to stop the discharge.

7. That when the disease occurs in the female in connection with anomalies of menstruation, these must be corrected by the usual means.

Referring to the bloody sweat of Christ, the celebrated Dr. Mead makes the following observations : * —“ Saint Luke relates of Christ himself, that, when He was in an agony by the fervency of His prayers, His sweat was like drops of blood falling down on the ground. This passage is generally understood as if the Saviour of mankind had sweated real blood. But the text does not say so much. The sweat was only ὡσεὶ θρόμβοι αἵματος, as it were, or like drops of blood ; that is, the drops of sweat were so large, thick, and viscid, that they trickled to the ground like drops of blood. Thus were the words understood by Justin Martyr, Theophylactus, and Euthymius.”

DELHI BOILS. By R. S. SISSON, M.D.

THE *literature* of Delhi Boils is scanty ; and being supplied almost entirely by the medical officers of the army in India, to the “ Army Medical Reports,” is little read by civilians. Consequently, the Delhi boil is known, even by name, to a few only of the medical “ gentlemen of England who live at home at ease.”

“ The *topography* of the Delhi boil is circumscribed. Thus “ travelled Thanes ” are to be found who never saw a case of this disease. Yet the disease is common enough at Muttra, Agra, and Lahore ; but commonest of all within the city from which it takes its name. In the “ Report of the Bengal Sanitary Commission,” 3rd May, 1867, it is stated that since 1857 it has affected no less than from 400 to 700 per 1,000 of the British soldiers quartered in Delhi, during the first year of their residence.

In the year 1707, aged 80, died the renowned Emperor of

* The Medical Works of Richard Mead, M.D. London : 1762, p. 630.

Hindustan, Arungzebe. By tradition we learn that this potentate fell a victim to Delhi boils. And the disease is now known to the natives of India by the name of *Arungzebe*. Delhi boils have, however, existed in India for generations, probably—in the phraseology of our legal brethren—“from time whereof the memory of man runneth not to the contrary.”

The Delhi boil is a hard, circumscribed, inflammatory tumour, commencing much after the fashion of the simple furuncle; but differing from this in being larger, in spreading wider and deeper in the surrounding tissues, in developing itself much more slowly—taking not less than two or three weeks to reach maturity, and in never going on to suppuration. Having attained its full size, ulceration commences, and spreads until the whole boil, with the exception of a “collar of brawn” at its base, is destroyed. And we now have a deep, indolent, and ragged ulcer of a very intractable character; *pari passu* with the expansion of the tumour, the neighbouring tissues become greatly and extensively indurated.

Such I believe to be the characters of the genuine Delhi boil and ulcer. Apparent varieties must be attributed to peculiarities of constitution or degrees of local action. For instance, when local inflammatory action is below *par*, we have an indolent tumour, which never reaches the ulcerative stage, but subsides like the common “blind-boil,” or remains stationary for years, as in the case below. Should the inflammatory action be above *par*, we get exfoliation of the inflammatory patch, with a cicatrix-like surface, or early ulceration. The pain attending this disease is variable; it is, however, sometimes intense immediately preceding ulceration. Of course, according to the degree of this pain, and the irritation of the resulting ulcer, will be the constitutional disturbance.

A previous knowledge of this disease, and the history of the case, will alone prevent errors in diagnosis. Delhi boils and ulcers, with their copper-coloured stains and exfoliations, are sure to be mistaken by the inexperienced for syphilis: and I may here state, *en passant*, that this disease bears, in some of its stages, a far greater resemblance to syphilis than three-fourths of the reported “cases of syphilis cured by chlorate of potash.” The course of the disease has so much in common with ague that I think we are justified in assigning to it the same *cause*, viz., malaria: thus, the disease is uncommon in winter; may not occur until long after the malarious locality has been left; and when once contracted may for

years be again called into action upon the application of any exciting cause.

Local treatment is all-important; and resolves itself into *ectrotic* in the stage of boil, *healing* in the stage of ulcer. For the former, daily painting with the *compound tincture of iodine*; for the latter, "sluicing" with *blistering liquid*, as recommended by Mr. Adams, of the Royal Orthopædic Hospital. In practice, however, I have found the less painful method of pencilling the skin around the sore quite sufficient. Constitutional treatment must not be neglected, and must consist in regulating the digestive organs and secretions by podophyllin, calomel, and other efficient purgatives, and in giving tone to the system by quinine, bark, the mineral acids, &c.

I append the following case as illustrative of the above description of the Delhi boil and ulcer:—

1864. Feb. 20th.—John L. presented himself at the Royal General Dispensary. Was with the army in the Crimea, where he suffered from rheumatism. Afterwards was five months at Delhi, where he enjoyed excellent health; returned home in 1857. After being about *six months* in England, was attacked with boils, which did not "ripen," but ulcerated on the top; and the ulcers did not heal, but continued to spread. After three months' suffering, applied to one of our leading hospitals, and had one of the "lumps" on the wrist cut; nothing, however, but blood came from it, and the operator allowed that he had made a mistake. Went from hospital to hospital, and from doctor to doctor, but without the slightest benefit, and without any of them being able to say from what disease he was suffering, unless from syphilis, which they all believed it was.

On examination I found four small—size of a nut—indurated, purplish tumours on the right wrist—amongst the rest *the one which had been cut years ago*—on the left forearm three similar ones. On the right forearm were several copper-coloured, squamous patches in various stages of exfoliation, some with cicatrix-like surface, and the integuments of the whole forearm more or less indurated. In the right popliteal space was a large ulcer—size of half-a-crown—looking as if punched out, with indurated edges, brown base, and discharging a tenacious, viscid matter. The surrounding tissues were hard as brawn.

Taking the appearances of the different lesions together, I was led to question my patient most minutely as to his ever having had any venereal disease at all; this, however, he most strenuously denied; and, from the bearing of the man and his

straightforward manner of answering my questions, I believed him.

The patient had formerly been affected with rheumatism; his urine was now dark, turbid, and acid. I therefore prescribed *alkalies with iodide of potassium and bark*.

Under some weeks of this treatment the tumours remained as they were, hard and indolent, neither subsiding nor going on to ulceration; the ulcer in the popliteal space remained also *in statu quo*. Other boils moreover appeared, and went through their regular course, viz., red patch, progressive circumscribed hardness, increasing prominence, darkening of tumour and ulceration.

Some medical friends, to whom I now showed the case, at once pronounced it syphilis; so, by way of a crucial test, I ordered my patient mercury. At the end of three weeks we had not made the slightest progress. An immense boil now made its appearance on the inside of the left thigh, and advanced with alarming rapidity. This I had painted daily with *compound tincture of iodine*, and the result was speedy disappearance of the tumour.

As local applications to the ulcer, black wash, and lotions of copper and nitrate of silver, had signally failed; and I now, at the recommendation of Mr. William Adams—who had successfully treated several cases of Delhi ulcer—tried the blistering fluid. The results were magical. Twice pencilling the edges of the ulcer with *liquor vesicatorius*, at a week's interval, settled the matter.

From time to time, however, my patient is still reminded of his troublesome complaint by a fresh outbreak. This we can now control; but a copper-coloured squamous eruption on the forearm, with induration of the surrounding integuments, remains unaffected by any treatment. For these, and for the total eradication of the *diathesis* created, I am now trying *arsenic*, which the patient heretofore has been unable to take.

REVIEWS.

Germinal Matter and the Contact Theory. By JAMES MORRIS,
M.D. Pp. 23. 1867.

THE above is the title of a thoughtful and suggestive essay from the pen of a gentleman already well known to the readers of the CUTANEOUS JOURNAL by an interesting paper on the nerves of the skin in health and disease which appeared in our last number, page 136. In the work before us the author aims at an explanation of the mechanism of contagion; the agent of contagion being, as he observes, *particles of living and growing matter*, or, in the language of Lionel Beale, who first gave utterance to this view, "germinal matter," which, being conveyed from one individual to another and meeting with favourable conditions, set up an action in the second individual indetical with that which the original particles possessed. This conveyance of particles from one body to another constitutes, in fact, a mode of *contact* as complete as that of the conveyance of vaccine lymph from one arm to another in the process of vaccination, and warrants the expression "contact theory" in association with "germinal matter," which is the essence of the proposition maintained by the Author. In the instance of vaccination, the vaccine lymph is "germinal matter," the medium of transmission is the lancet or the ivory point, the wounded derma supplies conditions favourable for the continuance of the life of the germinal matter, and the germinal matter so living and identifying itself with the components of the tissues by which it is received, communicates, firstly to the immediate tissues and then to the entire economy, its own special properties. But this grosser form of contact is perfectly unnecessary to bring about the same results; the germinal matter may be a particle thrown off from the mucous membrane or from the skin of a patient suffering under rubeola, scarlatina, or variola; the medium of conveyance, the atmosphere; the nidus of deposit of the particle the air-cells of the lungs; and then a similar series of phenomena becomes established.

The questions which rise to our mind, at the first blush of this inquiry are:—Do particles of the animal body retain their living and growing properties when separated from their parent source? Can such particles of matter be conveyed by means of the atmosphere from one individual to another? There cannot be a doubt but that these questions must be answered in the affirmative, and that all that remains for us to question is: How long particles of germinal matter may retain their vitality and reproductive power and to what distance they may be conveyed. Let us hear our author speak to these points.

1. Air floats with ease and for a considerable time and distance light and small masses of organic matter. It can carry large and heavy ones.—Volcanic dust and the sand of the African desert have fallen on ships far out of sight of land.

2. Minute portions of organic matter are constantly thrown off by animals and men. In scarlatina, the kidney often desquamates as well as the skin. The conjunctiva in ophthalmia, the air-ways in coryza and bronchitis, the alimentary tract in diarrhoea and dysentery; the genito-urinary surfaces in cystitis, gonorrhoea and syphilis; in fact, the whole inner skin throws off, according to the nature of the irritation to which it is exposed, its epithelium, the mucus-corpuscle and all its modifications, the pus-corpuscle, the compound granular-corpuscle, nuclear or molecular matter, blood, and even small shreds of its own substance.

3. These are received into the body, and some pass into the lungs, so as to reach the blood.

The lungs of dry grinders and masons tell us too plainly that even particles of steel and silica large enough to feel gritty in the tissue of the lung, and to be easily found when that has been by heat or chemistry destroyed, may do so; and yet such particles are almost pebbles for weight and size compared to the little masses of surface-dry organic matter to which we have directed attention.

My theorem, which follows as the inevitable conclusion, is:—that light little masses from the body of one individual are constantly received by other individuals so as to reach the blood.

This would be merely a disagreeable conclusion but of little moment, were it not that some of these matters are either living or contain living matter; and living matter, as we know,—matter in a state of active growth—has the power of exciting living action similar to its own in suitable material.

To these views of the author we cannot refuse adhesion, and we are duly impressed with their important bearing upon social life and upon the management of the sick. We also accept another proposition which the author puts with considerable force as follows:—“It would seem that, among poisons, the more similar the constitution of the matter

acting to that acted on, the more wonderful are the phenomena. No single dose of a poison from the mineral kingdom will produce even medicinal effect in a quantity less than about the fiftieth of a grain; nor from the vegetable kingdom in less than about the one-hundredth of a grain, but animal poisons have an activity far beyond this; as examples, take inoculation and the poison of dissecting wounds. The poison of one species acts usually less or not at all on others, as we see in cattle plague affecting the sheep less and the horse not at all. The most fatal dissecting wounds are from recent human bodies after systemic death, but before complete tissue death, while germinal matter remains still living; not from the horribly putrid, and not from the bodies of animals." But we are not so willing to agree with him; in fact, we entirely differ from him in a subsequent observation, namely that "in the same individual where, of course, there is often a predisposition to similar action, we often see discharge containing germinal matter acting locally on neighbouring parts; I may cite as instances, the effect of the discharge of verrucæ, eczema, impetigo and ecthyma on surrounding skin." It is not, however, in these cases, by virtue of the germinal matter that these fluids contain, that they set up a morbid action in the skin, nor do they exert a germinal influence, they are simply irritants, and effect no more than irritants of any kind whatever. A portion of skin throwing up a verruca, is prone to that action, and a slight stimulus will set the action in operation. The skin in an individual of eczematous diathesis, will develop an eczema, an impetigo, or an ecthyma, upon the most trivial excuse; by virtue, not of any special property of the irritant, but simply in obedience to its irritant action.

Germinal matter, however, deserves better treatment at our hands than to be passed over lightly. "It is," says our author,—

Distinguished from "formed material," tissue which has completed its growth, by great power of absorption, by which it attracts nutritive matter to itself, and converts it into its own substance. Dr. Beale points out, as a sort of test for it, the readiness with which it takes up the colouring of cochineal, and of course of other soluble matter also. I would remark, *obiter*, that I think he has here given us the clue to one of the modes of action of a large number of lotions, and of some internal medicines also. He showed, and this is of immense consequence, that such matter is capable of retaining its vitality under unfavourable circumstances for a long time; as, for example, the mucus and pus-corpuscle, the latter in weak tepid urine for forty-eight hours. He has also shown pus living in the cell of vaginal epithelium. In order to explain the phenomena of, for example, cholera in this

climate, we require on any theory to suppose that its poison can lie long dormant, and there are well-authenticated cases of infectious fevers breaking out a second time in houses, which make it necessary for any theory of them also to account for a period of dormancy ; now, surface-dry germinal matter is almost in the condition of an egg or a seed. Many low forms of vegetation grow only when the air is moist, and when it is dry are dormant ; infusoria, some of which resemble lumps of germinal matter, do so. Even a vertebrate animal, the mud-fish of the African rivers, passes the dry season, moist, in the midst of a cake of mud.

The germinal matter sometimes presents itself in a vegetable form ; “ it would seem that the spores, as they exist in the most deadly malaria, grow, and that with great rapidity, on the membrane of the capillaries of the air-cell, passing from time to time into the blood. This theory of ague gets rid in a great part of a puzzle of antiquity—the cause of the periodicity of ague, which is brought under the known laws of the periodicity of vegetable development.” We cannot very clearly see how the periodicity of vegetable development can explain the cold fit of alternate days such as it exists in ague ; but we can perceive a danger ahead in endeavouring to explain too much. The advocates of the parasitic theory of cutaneous disease, the *gardener’s* theory, take a very humble range of philosophy in their explanations of parasitic disease ; a plant produces seeds, and the seeds fly about from head to head, and grow in the epidermis and hair, and occasion disease, tinea, &c. And they believe it, or pretend to believe it, but we do not.

But the “ germinal matter ” theory may explain the development and the contagion of phytiform diseases, to which other explanations are wholly inadequate. The so-called spores of the phytiform affections, globular particles that enjoy the proliferating properties of plants, but have an animal origin, are essentially the granular components of the cells of the epidermis. They are, in reality, incomplete or germinal matter—matter that has failed of being converted into its perfected form, namely, that of corneous tissue, but retains its young and incomplete, its crude, its growing and proliferating form, and grows and proliferates instead of rising to its higher destiny. These particles of germinal matter are met with in children, and most abundantly at the growing and proliferating period of life, when, without due culture, the formative matter is very ready to run to weed. Children congregate ; these germinal particles are dispersed in the air ; they are inhaled by respiration, as Dr. Morris has shown to be the case with other particles ; they reach the air-cells of

the lungs, and so the blood; and they awaken in the skin of the infected a process similar to that which belongs to their nature. Is not this a thousand times more probable than the *gardener* theory, and a thousand times more rational. Every observation tends to show that this phytiform process takes place in the rete mucosum, in the shaft of the hair, situations which the humble seed-like spore could never reach by any process short of necromancy; the horny epidermis unbroken in both cases. But the germs may be taken into the very blood itself, and by an operation without which we ourselves should cease to live. Again, some of the phytiform affections, especially phytosis versicolor, the pityriasis versicolor of Willan, are symmetrical, spot for spot, on the two halves of the body: this has always been a stumbling-block in the way of the *gardener* theory, but comes forth as a powerful argument in support of the germinal theory.

We must apologise to our author for engrafting on his healthy stock a theory-bud of our own; a liberty we should not have presumed to take had we not felt that we might do so without weakening his arguments, and without disparagement to his merits. And we can assure our readers that an occasional half-hour of perusal and reflection devoted to "Germinal Matter and the Contact Theory" will not be without a harvest well worth the storing.

The American Journal of the Medical Sciences. Edited by
ISAAC HAYS, M.D. July, 1867.

THE *American Journal*, under the able direction of Dr. Isaac Hays, keeps up in the present issue the high character which it has acquired, and for years has sustained amongst medical periodicals, and does honour to the science and art of American medicine and surgery. Among other articles which will be read with interest in the present number is one from the pen of Dr. Carnochan, Surgeon in Chief to the State Hospital, New York, entitled:—"Case of Elephantiasis Græcorum, treated by ligature of the common carotid artery on both sides;" and illustrated with two excellent lithographic plates, the one exhibiting the face of the patient in all its most hideous deformity, the other the results of the treatment in comparative cure.

Dr. Carnochan, it will be remembered, was first among

surgeons to attempt the treatment of spargosis cruralis, the boucnemia or Barbadoes leg, also named elephantiasis Arabum, by ligature of the main artery of the limb. The success of his operations has been acknowledged by the imitation of several British surgeons; and Dr. Carnochan's practice may now be regarded as the standard surgical procedure in this complaint. The case before us is another example of spargosis, spargosis facialis et collaris, or elephantiasis Arabum of the face and neck, and certainly a very remarkable and as we believe, an unique case. But the great American surgeon's knowledge of Dermatology is not on a *par* with the accuracy of his eye, the acuteness of his knife, and the gentleness of his hand; and he very naturally participates in a certain confusion which is excited in the mind by the existence of a double signification of the term elephantiasis. The elephantiasis Arabum is a *local* disease, an affection of the nutritive functions, a simple hypertrophia or hyperplasia of tissue, the very thing to be governed by a modification of the circulating current by which it is supplied; but the elephantiasis Græcorum is a *constitutional* affection, a blood disease, engendered apparently by malaria, intermittent in its type, and a true fever of the blood, a disease about which the question of contagion is not yet definitively settled. Our colleague will appreciate the distinction: the tubercular growth of elephantiasis Arabum or spargosis is composed of healthy tissue in the wrong place, a hypertrophia, abundantly supplied with blood-vessels: the tubercles of elephantiasis Græcorum, the true leprosy, are a degenerated and disorganized tissue, very scantily supplied with blood, and the latter derived from an anæmic state of the constitution.

Dr. Carnochan informs us, and we can well understand the fact, that the elephantiasis Græcorum or true leprosy "is undoubtedly very rare in the United States, where but few cases, as far as I am aware, have been seen;" and refers to authors who may be considered as wholly out of date in respect of this disease at the present time; *e.g.* Larrey, Heberden, Robinson, Adams, and Rayer. In Great Britain, unfortunately, we cannot make that statement, for our colonies, East and West, supply us with occasional examples of the disease; and it has fallen to our own lot to see and have under treatment upwards of twenty-five cases. Leprosy, in fact, is, with us, one of the results of our conquests; and the child of the Anglo-Saxon in Hindostan too frequently imbibes, as the heritage of the valour of his ancestors, the seeds of that terrible disease. Dr. Carnochan was led to the idea of elephantiasis Græcorum, by the term leontiasis, which in some cases is

applicable to the tubercular form of that disease ; that form in which a row of tubercles occupy the eyebrows and give a frowning expression to the countenance, and in which the tension and disorganization of the skin destroy the roots of the supercilia and so give rise to baldness ; but in that instance the disease is uniform on the two sides of the face, and not unilateral, or pretty nearly unilateral, as in Dr. Carnochan's case. Moreover, the trichorrhœa of the eyebrows in the true leprosy is not a specific element of the disease, but a simple consequence of tension and atrophy of the normal structure of the skin, such as might occur in encysted tumour, or any form of interstitial or subcutaneous growth. With these remarks, which we trust Dr. Carnochan will take as they are intended, as a mere elucidation of a somewhat difficult question by a man who has devoted the best part of his life to the enquiry, we will proceed to give an abstract history of the very remarkable case before us.

Phœbe B., the daughter of healthy parents, and herself enjoying excellent health, observed, at the age of 38, a pimple, the size of a hempseed, and having a white sebaceous centre, just below the angle of the mouth on the right side of her face. In a few months the pimple grew into the resemblance of a "discoloured, smooth, warty excrescence" the size of a filbert, and was excised under the impression of its being an encysted tumour : the operation was attended with considerable hæmorrhage. A year later a new pimple arose near the cicatrix, and in six months reached a similar size to the previous tumour, and was in like manner excised ; still with much bleeding. Seven or eight months after that "another mammillated growth," irregular on the surface, and reddish, made its appearance, and reached the size of a walnut in two years. This also was removed, with abundant hæmorrhage. Subsequently to this, the third operation, the growth "continued to spread, the tubercular elevations becoming multiplied, and extending from the original focus of the disease in various directions." The progress of the growth during all this time being attended with heat, pricking, burning, and various painful sensations, and also with a deep discoloration of the surface.

On the 18th of November, 1858, when the patient first came under the notice of Dr. Carnochan, at the age of 44, and fourteen years after the commencement of the disease—

The morbid mass extended from an irregular transverse line a short distance above the superciliary ridges, downwards to the neck, as far as another line drawn across about an inch below the cricoid cartilage, and run-

ning backwards as far as the posterior margin of the sterno-mastoid muscle. Another line drawn upwards from the posterior extremity of the last, and passing behind and above the mastoid process, formed the boundary of the main mass in this direction; while, anteriorly, the disease passed over the mesian line, and occupied in a similar manner the other side of the neck, and three-fourths of the other side of the face. The morbid growth was more developed on the right side than on the left. On the back of the neck, as low down as the sixth cervical vertebra, the skin was wrinkled, irregular, discoloured, scaly, and studded with flattened elevations rising slightly above the level of the skin, which was also similarly affected on the supra-clavicular regions and the upper part of the sternum. The hairy scalp was in the same condition, more particularly on the right side of the head.

The colour of the skin or complexion was a dark dingy maroon or purplish hue in the region of the face; on the neck the colour was dull and leaden, without any reddish tinge. There was a general sensation of harshness imparted to the touch in passing the hand over the mass. The cutaneous tissues on the lower part of the forehead were discoloured, thickened, and furrowed with wrinkles. On the face the tissues were somewhat semi-elastic and boggy, and softer than on the region of the neck; here the tissues were positively pachydermatous and dense like elephantiasis Arabum.

The scalp had become partially despoiled of hair from the disease; some of the hair also of the eyebrows had fallen out, and part of the eyelashes were lost. The eyelids were swollen, and so much hypertrophied as to project beyond the level of the forehead, and completely occlude the ocular fissure. Vision, on the right side, was entirely obstructed, and the power of elevating the eyelid was altogether lost. The nose was enlarged, irregular on the surface, and pushed towards the left side, where the tissues were not quite as tumid. The nostrils were blocked up and misshapen. There was no sense of smell. The *alæ nasi* were uneven and knobby, and merged into the rough and dense mass of the cheeks and side of the face. The cheeks, particularly on the right side, were much swollen and elevated beyond the natural level, rough, and deeply furrowed.

The lips were much hypertrophied, thickened, and deformed, and the mouth so occluded as to scarcely admit of the passage of a teaspoon into the cavity. The upper lip had an elongated appearance, rough, but not tuberculated, while the lower was beset with a cluster of mammillated elevations. Nourishment was taken with great difficulty, and mastication was almost impossible; taste imperfect.

The ears, particularly the right, were much enlarged and tumefied. The right ear stuck out or projected from the head; the *concha*, *tragus*, *anti-tragus*, and *lobule* presenting one large, irregular, furrowed mass of a dusky reddish hue. The *meatus externus*, on this side, was completely obliterated. Sounds were almost inaudible. The chin and neck presented a huge hypertrophied mass, extending to within a short distance of the sternum and clavicle. The tissues here were harder and denser than at other parts, rising above the level of the natural surface about four inches, and studded with numerous tubercular and mamillated elevations.

The integuments of the trunk and extremities, with the exception of that

on the sternal and supra-clavicular regions, did not present any manifestation of disease.

The general health of the patient was not good ; she had sleepless nights, and had to be bolstered up in bed on account of the difficulty of breathing, arising from the pressure of the diseased mass in the neck upon the trachea. She had but little appetite, and was frequently feverish. The menstrual function was regular.

The "operation of tying the right common carotid artery was performed on the 28th of November, 1858." "The hæmorrhage was exceedingly profuse, showing that the smaller vessels ramifying through the hypertrophied structure were unusually active, enlarged, and numerous. . . . The ligature came away on the twenty-eighth day. The operation was followed in a few minutes by a perceptible and general shrinking of the enlarged structures and a diminution of the density of the mass ; the colour became less deep, and the temperature was considerably lower." At the end of a fortnight "the change became so great that the patient could see and hear," and the diminution of bulk of the diseased mass continued progressively for three months, when further reduction of size appeared to cease.

On the 14th of June, 1859, six months after the first operation, the common carotid was tied on the left side, the ligature separating on the twenty-eighth day, as before.

In October, 1860, the curative process was apparently stationary or passive. The mammillated tubercles on the back of the neck had now become shrivelled and scarcely perceptible, leaving a surface somewhat softer and but slightly wrinkled or discoloured. Partly from the shrinking of the surrounding tissues, and partly from increased growth, several nipple-like tubercles on the lower portion of the cheek on the right side had assumed the shape and size of a hen's egg. A strong double ligature was passed through this part of the cheek, with the intention of strangulating the projection at its base. This was partially effected in about a week, and the remaining pedicle was divided by the knife. A large granulating surface was thus left, which healed readily, leaving a white solid cicatrix on the natural level of the cheek.

Between this period and January, 1866, tubercular masses were removed from time to time, and in December, 1866, the author observes :—

About eight years have now elapsed since the first ligature was applied upon the trunk of the common carotid. With the exception of occasional indisposition, generally arising from the effects of cold, Mrs. B. has enjoyed a

very tolerable condition of health. At present all the functions are well performed physically and mentally. She is in good spirits, and is a useful person in the household of which she is a member.

In the same journal is an article entitled, "Contributions to the Statistics of Human Growth," by W. S. W. Ruschenberger, M.D., U.S.N., in which the author remarks:—"It seems probable that the length of the cerebro-spinal column may be a more valuable element in estimating the physical qualifications of a recruit than the total stature. A long and otherwise fully developed trunk affords more space for the accommodation of organs essential to life than one of smaller dimensions. The size of the contained organs is proportionate to the capacity of the cavities provided for them; and it may be assumed, that, all things being equal, the size of an organ is a measure of its power. . . . The length of the cerebro-spinal column in adolescents of the same stature differs from one half to three inches. One candidate, whose stature is $73\frac{1}{4}$ inches, has a cerebro-spinal column half an inch shorter than another whose stature is 68 inches, or $5\frac{1}{4}$ inches less. . . . The fair standard of weight of candidates for admission into the naval academy should be one pound and a half to each inch of stature. For example, an individual 60 inches in height should weigh ninety pounds. . . . The extreme difference of the height of eight boys of the age of twenty years and two months was found to be $12\frac{1}{2}$ inches; and of fourteen boys aged sixteen years and six months the difference between the shortest and tallest $9\frac{1}{4}$ inches. . . . In two months eleven boys increased in weight, varying from two to nine pounds, and also in thoracic circumference and expansibility, the increase varying from one quarter of an inch to 4 inches."

Reliable observations of the above nature are equally useful in the practice of medicine as for the purpose for which they were intended by the author.

The Indian Medical Gazette, a Monthly Record, &c., vol. i.
Calcutta: Wyman, Brothers. 1866.

WE take up with much pleasure the handsome quarto volume of the above work; it opens with promises which we doubt not will be fulfilled, and we wish it every success. In Britain we look with much interest to the labours of our Indian brethren; and, if we find them less active in the field of research than we are ourselves at home, we believe

that the greater part of the fault lies in the want of an easy means of making their researches known. How much that the head once knew is lost from the neglect of committing it to the protection of the pen at once; we are apt to think a fact gathered here and there of too little value to be preserved; but bring these facts together, store them up, display them side by side, and then the blessed light of truth shines forth from them in all its splendour. The *Indian Medical Gazette* undertakes this storage, this display, and we wish the intentions of honesty and truth the triumph which they deserve. This welcome volume comes to us too late in the quarter to enable us to do justice to the whole of its contents, but we propose to cull a blossom here and there for the gratification of our readers, and leave the rest for a future opportunity.

As our able contributor, Dr. Sisson, has brought before our readers the very curious and interesting subject of Delhi Boils; we cannot do better than record the experience on the same subject of Dr. G. K. Poole, Assistant-Surgeon of the 25th Regiment of Punjaub Native Infantry. He states that his regiment, composed of Mussulmen, Sikhs, and Paharees, came to Delhi in December, 1864, and remained free from the scourge until the following June, when the first "Delhi sore" was observed. He then proceeds to say:—

A small, slightly elevated, reddish spot makes its appearance, often on the elbows and knees, and not unlike a spot of herpes, except that there is no contingent redness; the spot may be very small at first, not larger than a pea, or No. 4 shot, perfectly painless, with a roughish feel under the finger, and well called "the musquito-bite stage." In this state the spot will remain perhaps for a week or two, when it will, if left alone, commence to spread; the surrounding skin will become infiltrated, and the sore itself rougher and more scaly, and a slight pressure will produce a peculiar sero-purulent discharge from beneath the scab; after this the ulceration rapidly spreads, burrows beneath the skin, which becomes livid, and in time ulcerates, and an open fungating sore results, rarely attended with pain, so that often patients present a most unsightly appearance and hardly the least uneasiness; these ulcerations are attended with an irritating discharge, which is capable of producing a similar action if applied to any open healthy sore; after a time, however, the disease appears to exhaust itself, and the sores dry up and leave a scaly mass to peel away gradually, often leaving behind it an unsightly scar which is never effaced. It appears, however, that the disease, which in its very early stage is quite amenable to treatment, if allowed to go on to ulceration, becomes most intractable and difficult to cure, resisting all treatment, until it gradually wears itself out and dries up. Caustics and iodine with pressure or irritating poultices, such as neem, covered with sheet lead, appear to answer best when the sore is open and fungating, or the unguentum æuginis of the Pharmacopœia Edin. But in the early stage, when the

peculiar "spot" is observed, there is nothing like "enucleation;" and this should be done before the skin ulcerates. Potassa fusa, nitrate of silver, or the actual cautery may be used for this purpose; in my hands the latter has proved itself most effectual, though it has been condemned as barbarous and inelegant, yet most suitable for the large body of men with whom I am dealing. The men themselves have full confidence in this treatment, and it is no uncommon thing for them, in the interval of my weekly inspections, to recognize the characteristic spot in its "musquito stage," as Dr. Murray calls it, proceed to the blacksmith's shop, and burn it out then and there. Poul-tices of neem leaves, or linseed meal mixed with the boiled leaves of the common neem, are well-known useful remedies for Delhi sores among the hakeems of the city, who also use an "omnium gatherum" sort of ointment composed of caustics and astringents. I have scarcely found it necessary to admit any Sepoys suffering from Delhi sores into hospital, but those that have been admitted have simply been treated with tonics, alteratives, and cleanliness; and it is to be observed that, I may say without exception, every bad case of Delhi sore I have had, has not been seen, through inadvertence, in its early stage. Whether the Delhi sore poison is of an animal or vegetable nature, or parasitic, I am not prepared to state. I do not believe the disease is, which has been stated, dying out; the fact is, it is more looked after than it formerly was, and early sores detected and treated. As to its contagiousness, I fully believe in this, as I have seen simple cases of "foot sore" if carelessly dressed along with those of Delhi sore, speedily take on the same nature.

Dr. Poole further mentions that of 162 cases of Delhi sore that occurred in his regiment between January 1865 and September 1866; 103 were cured; 47 remained under treatment, and the remaining 12 left before their cure was completed.

The subject of *human horns* is illustrated by two cases, one from the pen of Mr. John C. Whishaw, of Fyzabad, Oude; the other from that of Mr. Samuel P. Johns, of Agra. In Mr. Whishaw's case the patient (Kasi Ram Pandey) was a young man aged 22; the horn had been growing from the top of the head for five years; when it had reached three inches in length it was cut through; and the same operation has been repeated three or four times. "It is now about an inch and a half in circumference, and about a quarter of an inch in length, having been cut off about six weeks ago. The base is surrounded by elevated integument. The horn is ribbed longitudinally, is waxy in colour, hard, and possesses all the external characters of horn."

Mr. Johns' case was a man named Sava Ram, a Goojur by caste, aged 45. The horn which had been growing for more than sixteen months was a "hard, straight, and somewhat conical body, growing from the right side of the abdomen,

midway between the last rib and the crest of the ilium and measuring $3\frac{1}{2}$ inches in length and four inches in circumference at its root. Like a horn, it is round and pointed, slightly curved at its extremity, and surrounded by hard and elevated skin at its root."

Apropos of horns, we may mention that a case of human horn is reported in the "Transactions of the Pathological Society of London," by Mr. Charles Roberts, of York:—

The horny growth was removed from the face of an old woman, about 75 years of age, the wife of a blacksmith. It was growing from the skin immediately over the edge of the lower jaw, on the left side, at a point corresponding to the angle of the mouth. The patient states, that about three years ago a small wart (which she had had all her life) became irritable, and, from frequent scratching, bled freely. As the irritation subsided, a horn grew, and slowly increased in size for two years, when she broke it "short off." The present horn has been the produce of the last twelve months, and has increased in diameter and length much more rapidly during the last three months. The soft bulbous base was very vascular and painful, and the horn, by hanging down into the neck and catching the dress, was a source of great pain and inconvenience to the patient.

Mr. Roberts leaves the question in doubt whether his case was one of real horn—that is, desiccated sebaceous substance, or the dried secretion of an epithelioma. We incline to the former opinion, although he informs us, "that the patient is now suffering from a cancerous tumour of the face, which appeared about a year ago as a small ulcer on the side of the nose." The occurrence of epithelioma on one part of the skin, concurrently with a morbid state of the glandular system of another, is perfectly consistent, without the supposition of carcinoma in the latter case. We may repeat that the so-called human horn is invariably a "sebaceous production."

Clinical Memoranda.

MELASMA ARSENICALE.—Melasma arsenicale differs from melasma argenteum or argyria, in being a physiological and not a chemical change. In the latter the colouring matter is an oxide of silver diffused through the substance of the papillary layer of the cutis, and permanent in its nature. The former, namely the arsenical melasma, is a concentration of pigment in the rete mucosum, the consequence of an alteration of innervation and circulation in the skin; and only differs from ordinary melasma and chloasma in the character of the stimulus applied. Submitted to chemical analysis it is more than probable that in arsenical melasma traces of the metal might be discovered in the tissues; nevertheless, arsenic enters for nothing into the composition of the pigment; and the colouring matter, as in common physiological pigmentation, is produced, as we conceive, by an alteration of the blood corpuscles, brought about by a special stimulus of the vasculo-motor and trophic nerves. Arsenical melasma is not a common occurrence, and like argyria it is one of those results which, had we the power, we should carefully shun; it is too frequently, as in the case about to be narrated, the consequence of the abuse of arsenic; of employing it in over large doses; or of continuing its use for a too greatly prolonged period of time. It may be stated, *in limine*, that although we employ arsenic in many affections of the skin, there is one only, namely alphas, in which we use it specifically, and in that disease, as in others, with caution and under frequent observation.

A lady, aged 37, has suffered from gutta rosacea for two years; and for fifteen months has been pursuing an arsenical treatment, taking the remedy in large doses. The gutta rosacea, as might be expected is wholly uninfluenced by the treatment, because the treatment is wrong and should never have been practised. No one who knows the first rudiments of cutaneous pathology and therapeutics would think of submitting a patient to a course of arsenic for gutta rosacea. We say this in passing, not in criticism of the practitioner who administered the arsenic, but simply to fix in the mind of our readers that there is a principle of treatment in cutaneous disease as in other diseases; and that all cutaneous complaints are no more to be treated with arsenic or sulphur, than other diseases by specifics alone.

After two months of arsenical treatment the lady observed the commencement of the change of colour of the skin which at present exists; it was first perceived on the fine skin of the abdomen, next on the breast and neck, then on the face and hands, and afterwards by degrees it became diffused over the whole body. At the present time her appearance is very remarkable, her complexion presents a deep yellowish-brown tint more striking upon the

eyelids (blepharal melasma) than elsewhere, while the eyeball possesses the dark tinge and brilliancy which we described several years back under the name of *melasma oculi*.* But although no part of the surface of the body has escaped the change, the skin of the abdomen is the deepest in colour ; next, that of the root of the neck ; while on the hands the colouring is less uniform, and forms blotches which cover the knuckles. On close examination there appears to be a granular condition of the skin from hypertrophy of the follicles, and these prominences being lighter in tint of colour than the interfollicular spaces, give rise to a speckled appearance.

Besides the augmented pigmentation of the skin, there exist other symptoms which are equally referrible to over-excitation by arsenic ; the eyelids are puffed ; the hands and feet are swollen, the latter being œdematous ; the wrists and fingers are weakened in power ; profuse perspirations occur upon moderate exercise and under slight mental emotion ; there is a state of tremor of the muscles ; and a chronic erythema (*erythema arsenicale*) of the palmar surface of the hands and fingers, and of the soles of the feet. The patient is emaciated, has a troublesome cough, has lost her appetite, has frequent fits of depressed spirits, and has the appearance of being shattered in constitution.

The characteristic sign of the action of arsenic, as commonly exhibited by the tenderest region of the surface of the body, namely, the conjunctiva, is absent ; but with this exception scarcely a symptom of the poisonous influence of arsenic on the constitution is wanting. She was frequently obliged to stop the remedy in consequence of swelling of the tongue, and, as we have already mentioned, the fingers and feet still remain swollen. But the most striking evil resulting from the action of the arsenic, next to the melasma, is the state of chronic erythema of the palmar and plantar surface of the hands and feet. These surfaces are red, hot, and swollen ; the cuticle is dry, harsh, and desquamating, and covered with hard, dry points, corresponding with apertures of the sweat-glands, which resemble minute corns, and which she designates by that name ; while she complains very much of the tenderness and burning heat of her fingers. We have more than once seen partial paralysis of one or more of the fingers, and of one of the hands produced by arsenic.

LEUCASMUS PARTIALIS, WITH POLIOSIS.—*Melasma* may exist without *leucasmus* ; but *leucasmus* is rarely present without *melasma*. *Melasma* may be a mere physiological augmentation of colour ; *leucasmus* exhibits a morbid derangement of pigmentation, an exhaustion of pigment as far as itself is concerned, but carrying with it a disturbance of pigmentation of the rest of the surface to a greater or less extent. Derangements of pigmentation are generally due to disturbance of function of the organic system of nerves, referrible to the great ganglionic centres ; but we occasionally meet with instances in which no such disturbance can be detected, and which suggest the possibility of a local cause. The case we are about to narrate comes directly under neither category, but may be regarded as an example of the disorder occurring in conjunction with a fair state of general health.

* *Vide Dyschromatoderma ; or, Discoloration of the Skin. — British Medical Journal for 1863.*

The characteristic features of leucasmus are :—1. Absence of pigment more or less general ; 2. Excess of pigment immediately surrounding the bleached spot, and more or less generally diffused elsewhere ; 3. Lowered sensibility of the leucasmic spot, with partial atrophy ; 4. Reduced energy of nutrition of the skin generally, and sometimes of the rest of the system ; and, 5. Deficient sanguification. Let us see how these characters correspond with the symptoms of the case before us.

A country girl, aged 16, the eldest child of a family of four or five, who had menstruated at the proper time, enjoyed good spirits, and had never suffered from illness of any kind, was observed, a year ago, to have several patches of white hair on the right side of the head ; there were two or three, each of the size of a shilling, above the ear, and one of the size of a penny-piece, on the temple. A few months later, her father drew her attention to the apparently dirty state of her neck, and then there were discovered three leucasmic spots, each as large as a crown-piece, two immediately below the ear, and one upon and beneath the body of the lower jaw. The skin of the leucasmic blotches was softer and more delicate in texture than the adjacent integument, and its whiteness was brought into greater relief by the deep brown areola in which it was, as it were, enchased. The rest of the skin of the neck presented the deep brown of melasma ; the face was embrowned and tawny, and the brown tint extended over the whole of the trunk of the body, but not to the extremities. On careful examination of the trunk of the body, a few small whitish spots were detected here and there, speckling the surface ; and a cluster of these white spots on the side of the waist indicated the traces of a bygone herpes zoster.

As we have already said, there was nothing about the girl to denote disorder of health ; on the other hand, a certain deficiency of nutritive power might be inferred from her being somewhat below the average of size for her age ; from a whiteness of conjunctiva, suggestive of a poverty in a slight degree of the red corpuscles of the blood ; and from a little dryness of her lips ; nevertheless, all her functions were properly performed. Defective nutritive power was shown locally in the thinness and want of firmness of the leucasmic skin, as also in the arrest of pigment-formation on the affected spots : the skin was bleached, and the hairs white. Deficient innervation was exhibited by a partial state of insensibility to the action of strong acetum cantharidis, when painted on the leucasmic spots with a camel's hair brush. It was also shown in the excessive accumulation of pigment on certain parts of the body ; for one of the most important functions of the nervous system is to equalize the distribution of power, and to regulate function. Equalization and distribution are both faulty in leucasmus, and this deficiency we are bound to refer to an error of nervous function.

HERPES BILATERALIS LABIALIS ET LATERALIS NASI.—Herpes zoster presents us with an example of the operation of an irritant cause, generally cold, on the trunk or on a considerable branch of a nerve. The cause, without a doubt, acts directly on the trunk or branch, and the irritation is manifested by the peripheral extremity of the nerve. There is a *selection* of a single nerve, and we may infer, from the cutaneous manifestations, that *sometimes more* and *sometimes less* of the course of the nerve is involved in the disorder.

Sometimes the whole tract of the nerve, from its origin to its ultimate distribution, may be affected ; but, in general, we should infer that only a part of its length is attacked. There cannot be a doubt that the morbid affection of the nerve may be thus partial, and, if this be conceded, then it may be presumed that the operation of the cause might, under certain circumstances, be peripheral only, without extending for any distance along the trunk of the nerve or perhaps without reaching the trunk at all. In this presumption we have, as we believe, the explanation of bilateral herpes as it affects the lips, the interior of the mouth, and the penis or pudendum. A case before us is one in point : a lady of nervous temperament and sensitive organization, was disordered by some irritant food ; upon this disorder she took cold, which assumed the character of catarrh ; she was depressed physically and morally, her mouth was hot and dry, her gums and teeth painful, her throat sore, and the submaxillary glands tender. With these symptoms there occurred a small patch of herpes on either side of the lower lip, near the angle of the mouth ; and a patch on the side of the nose, near the ala. The patches appeared in succession, first that on the lip, next that on the nose, on the same side with the lip ; then the lip on the opposite side. The cause was evidently not one dependent upon irritation of the trunk of a nerve, nor of a considerable branch ; but it was obviously an irritation of peripheral ramusculi of the oculo-nasal and mental nerve of one side, and of the mental nerve of the opposite side ; the cause of the irritation being the inflammatory action taking place in the mucous membrane of the mouth and nares. Essentially the cause was the same as that of herpes zoster, *an irritant*, in the one case acting on a large extent of nerve, in the other on a small extent ; in the one case a cold temperature, in the other disordered function with an elevated temperature.

Miscellaneous Memoranda.

INTERMITTENT URTICARIA.—M. Dumontpaltier reports a case of intermittent urticaria of very marked character in the *Bulletin de l'Académie Impériale de Médecine* for November 30th, 1866, in which the attacks appeared each night for six weeks, and it was interesting, in consequence of the fact that different members of the same family appeared to have each of them some neurosis. The parents were asthmatic, the grandfather asthmatic, the grandmother had angina pectoris and rheumatism, the brothers were rheumatic, and four of the children suffered from intermittent diarrhoea, alternating apparently with the tendency to or actual development of urticaria.

THE ZITTMANN TREATMENT.—We are glad to observe that the Zittmann treatment occasionally meets with a worthy advocate. In our own practice we place it by the side of mercury and iodine ; all the three excellent in their way and at the proper time, and admitting of no substitution. Those who

use and know how to use these remedies are fully aware of their perfect qualities ; they have seen cures effected by them over and over again, sometimes alone, sometimes in combination ; they know which to select for the particular case, which is right for the time, although it might not be right at another time, and they know that they may be employed safely and successfully. But cases sometimes occur in which mercury is no longer advisable, and iodine is no longer proper, and then comes the triumph of the Zittmann treatment. It either cures at once, or it prepares the way for a cure ; and in every case it removes from the system every particle of mercury or iodine which may be present and may interfere with the further use of those remedies ; and it supplies us with a virgin soil for the readministration of those specifics if thought necessary. Mr. Buxton Shillitoe, whose paper in the *Medical Times and Gazette* of May 11th, 1867, has suggested these remarks, observes :—" We have in Zittmann's plan a remedy of undoubted value. The dieting, combined with the sweating, purging, and diuresis, promotes the action of the secreting and excreting organs. It is essentially eliminative, and would, no doubt, be found useful in many other diseases. In tertiary syphilis, where the system is often saturated with the remedies that have been ineffectually given for the cure of the disease, I believe it will be found to be of great value. The almost immediate action that it has upon the general aspect of the patient is surprising. My first patient had marked syphilitic cachexia, but by the end of the fortnight his skin became as clear and white as a child's. The urgency of his symptoms on his relapse, and the great inconvenience attending a fortnight's absence from business, prevented my trying the same remedy again." Mr. Shillitoe, in the cases which were not cured immediately by the Zittmann treatment, was enabled to cure the disease completely and in a short time in rebellious examples of tertiary syphilis, by the subsequent exhibition of iodide of potassium in large and increasing doses.

THE BATH OF HEALTH.—There is another mode of ablution which in my opinion is the height of luxury, and it is a luxury which I enjoy myself every morning of my life. Let the reader, after his shave, divest himself of his flannel dressing-gown, and in the uniform of Adam bend over his hip-bath, and give his face and neck a good wash ; by the side of the washing-basin, the hip-bath is a small ocean, in which he can souse and snort like a sea god, unfettered in position, uncramped by the narrow dimensions of the washing-stand, and safe against the risk of bespattering the paper of his apartment or flooding all the joints and drawers of the table with the scattered water. After such a wash he must feel as I myself did when I first tried it—that he had never had a wash before. Then, the head and face washed and dried, let him rub his soap-cake into the armpits and all the creases of the body, and with the hand raise a good lather ; then let him sit in the hip-bath, and with a large sponge spread a stream over the shoulders and trunk, and thoroughly rinse away the soap ; next let him stand up in the bath and flood the legs with his sponge ; then soap the feet and toes with as much care as he would his hands, first one foot, then the other foot, still standing in the bath ; then let him rinse the soap from the feet, and step out upon the woollen rug on which the bath stands. After that, let him take his seven-feet-long

bath-cloth* and throw it mantle-wise over his shoulders, and dry himself leisurely ; first the arms, then the trunk, next the feet, and then the legs. Then he will be ready to admit that he has enjoyed the perfection of a bath, and regard the hip-bath with the veneration which it deserves : a gallon or two of water has given him a sense of comfort that will hardly wear off with the day. After the bath the clothing should not be put on too hastily ; to give time to the air to make acquaintance with the skin.—*Healthy Skin*, Seventh Edition, p. 173.

SECONDARY SMALL-POX.—The fact of the occurrence of small-pox a second and a third time is now generally recognized ; but according to ancient belief the disease happened only once in a lifetime. The Arabian physicians, who entertained this opinion, nevertheless admitted, according to Diemerbroeck, that when the first *fermentation* of small-pox did not expel the whole of the *menstrual* humours from the body, subsequent *ebullitions* would take place, and the small-pox would occur a second time, sometimes even a third, but very rarely a fourth time. And it stands on record that Louis XV. of France suffered an attack of small-pox for the second time.

BATHING IN WINTER.—There are few of us who fail in the use of our cold tub all the year round ; but we nevertheless read with some degree of astonishment the report of the officer of the Receiving-house in Hyde Park, “that ten persons bathed in the Serpentine yesterday morning [January 14th, 1866, thermometer 13 degrees], and there is not a morning throughout the winter, however cold, when there are fewer than from ten to fifteen bathers.”

SMALL-POX AND MEASLES.—These eruptions were regarded as mere varieties of the same disease until a period comparatively recent. Diemerbroeck says of measles : “*differunt a variolis accidentaliter ; seu secundum magis et minus.*”

CRYSTALS OF ARAGONITE have been found upon the tympanum by Dr. Aug. Lucae, of Berlin, and Professor Roser. The patient had difficulty of hearing with both ears, but principally the right ; the tympanum was covered with a thick layer of epidermis ; and when this layer was removed by means of oleaginous injections and tepid water, the crystals were found between the layers of the epidermic cells. Crystals of aragonite have been found in various parts of the body where an accumulation of decomposing substance exists, and are also met with in the urine of horses, rabbits, &c.—*Virchow's Archiv*, vol. xxxii.

SUDDEN BLANCHING OF THE HAIR.—Physiologists have been at a loss to account for the sudden whitening of the hair which is known to be produced by intense and sudden terror or profound grief. Mr. Erasmus Wilson, in a paper recently read at the Royal Society, threw considerable light upon the question. The paper was founded on a case apparently unique, in which every hair of the head was coloured alternately brown and white from end to end. The white segments were about half the length of the brown, the two together measuring about one third of a line. Mr. Wilson suggested the possibility of the brown portion representing the day growth of the hair,

* The best kind of bath-cloth is one made of coarse linen, three feet in breadth, the usual breadth of the stuff, and seven or eight feet long.

and the white portion the night growth, and this opinion was corroborated by the remarks of Dr. Sharpey and others of the Fellows who took part in the discussion which followed the reading. Under the microscope the colours of the hair were reversed—the brown became light and transparent, the white opaque and dark; and it was further obvious that the opacity of the white portion was due to a vast accumulation of air-globules packed closely together in the fibrous structure of the hair, as well as in the medulla. There was no absence of pigment, but the accumulation of air-globules veiled and obscured the normal colour and structure. Mr. Wilson observed, that as the alteration in structure which gave rise to the altered colour evidently arose in a very short period, probably less than a day, the occurrence of a similar change throughout the entire length of the shaft would explain those remarkable instances, of which so many are on record, of sudden blanching of the hair; and he ventured to suggest that during the prevalence of a violent nervous shock the normal fluids of the hair might be drawn inwards towards the body, in unison with the generally contracted and collapsed state of the surface, and that the vacuities left by this process of exhaustion might be suddenly filled with atmospheric air. Dr. Sharpey mentioned a recent example of sudden blanching of the hair which had been observed by Dr. Landois, of Greifswalde, as reported in Virchow's "*Archiv*," and which was ascertained to be due to accumulation of air-globules in the fibrous substance of the hair.—*Lancet*.

EPITHELIOMA OF THE FACE TREATED SUCCESSFULLY BY CHLORATE OF POTASH.—Dr. Alphonse Milcent, in the *Art Medical* narrates a case of epithelioma situated at the root of the nose, and of two years duration, which was cured in six weeks by the application of chlorate of potash. The disease was in the state of ulceration, exuding a small quantity of ichorous fluid which dried up into a dark crust, and accompanied with shooting pains. The potash was diluted with three parts of water, or honey, and applied with a small brush, or in the form of a paste, and kept constantly in contact with the ulcerated surface. In a few days an improvement in the appearance of the sore became visible; and in five days it was healed.

EPHIDROSIS.—Jito Dutt, a healthy young man, and by profession a weaver, attended the Dispensary of Chuckdigeo on the 24th of April, 1866, complaining of continual sweating of his hands and feet. He had been suffering from it a year, and the flow of sweat was continuous, the same in quantity both day and night and during all seasons. The drainage of fluid was so copious that nearly a pint might be collected in twenty-four hours. His previous and present history bespoke no ill health.—*Kamikhya Nath Acherjee; in the "Indian Medical Gazette" for 1866.*

Correspondents.

THE FIRST NUMBER of this Journal being out of print, the Publisher would be glad to give the full price for any spare copy our friends may happen to possess.

CONTRIBUTORS are requested to send in their PAPERS as early in the quarter as possible; all *communications* to be addressed to the EDITOR, 17, Henrietta Street, Cavendish Square.

LECTURES ON CUTANEOUS MEDICINE AND DISEASES OF THE SKIN.

BY ERASMUS WILSON, F.R.S.



LECTURE IV.

On the Pathology of the Skin.

GENTLEMEN,

THE diagnosis of cutaneous disease differs in no respect whatever from that of other diseases; just as we determine the presence and nature of disease in general by its symptoms, so symptoms or signs, or as we term them *lesions*, are the characters by which we distinguish the presence and nature of diseases of the skin. And it must be remembered that symptoms or signs are not the properties of disease alone, but that they belong equally to health. By the bedside or in the consulting-room, it is as necessary to be able to appreciate the signs of the skin of health as those of disease; and this kind of knowledge is applicable, not to the skin only, but to the state of health of every part of the economy.

We have shown that the principal signs of disease of the skin may be embraced under *six*, or, if you prefer it, under nine heads; and to these heads we assign the term *lesions*; thus there is *redness*; then there is prominence in the three degrees of *papula*, *tuberculum*, and *tuber*; then there is the uplifting of the epidermis by the effusion of serous fluid, constituting *vesicula* and *bulla*; next, the uplifting of the epidermis caused by the accumulation of pus, namely, *pustula*; then a state of abnormal formation of the epidermis, or *squama*; and sixthly, an alteration of colour of a persistent character, or *macula*. Let this, Gentlemen, be your first lesson in diagnosis, and we will ask you to study it well, for in it you have a key to the knowledge of every disease of the skin and

many of those of the general system. The expert will tell you off a disease at a glance, but it is only through this process of examination, developed by experience into an instinct, that he has arrived at the extraordinary facility which he seems to possess. We not only call the signs which we have just been describing lesions; but we also distinguish them as *primary lesions*, that is to say, as the first and earliest appearances of disease; and not only the first and earliest appearances, but also as the complete signs by which, without other help, we can determine the diseases to which they belong. But the primary lesions are very rarely permanent, and in most instances they are little more than the primary stage of a secondary change; or they are the exciting cause of certain secondary phenomena; hence, it becomes our duty, in the next place, to study these secondary signs, or as they are commonly denominated, *secondary lesions*. To illustrate briefly the nature of secondary lesions, let us run again over the primary lesions, and consider in what way they may be capable of operating secondary changes. Rubor, or redness, is a hyperæmia; the causes which sustain hyperæmia will very probably arrest the nutrition of the epidermis; the horny layer of the epidermis will separate from the rete mucosum, desiccate and exfoliate; this constitutes the secondary lesion, *desquamation*. Papula is remarkable for its itching propensities, so much so that one instance of the lesion is termed prurigo; itching leads to rubbing and scratching, the heads of the pimples are torn off, and then we have an example of the secondary lesion, *excoriation*. Vesicula, besides the surface-effusion, or exudation, which gives it its specific character, is accompanied with a tissue-exudation or œdema, and a persistence of tissue-exudation leads on to the secondary lesion, *induration*. Pustula consists essentially in the development of a new pathological product; that product by drying upon the surface constitutes a scab or crust, hence the secondary process, *incrustation*. Tuberculum and tuber are apt to run on to solution of continuity and so to give rise to the secondary phenomena, *fission* and *ulceration*; and, consequent upon ulceration, to *cicatrization*. Squama, and sometimes macula, results, like rubor, in desquamation; and rubor, or hyperæmia, is very commonly succeeded as a secondary change by *discoloration*. The secondary lesions, therefore, that we have now to consider, we have arranged in the tabular scheme to which we direct your attention, and we shall pursue their further consideration in the order in which they are here set down, namely:—

Desquamation,
Excoriation,
Induration,
Incrustation,

Fission,
Ulceration,
Cicatrization,
Discoloration.

Desquamation, that is, the spontaneous separation of the epidermis from the derma, is a very common and usual consequence of hyperæmia of the skin, and presents some variety of manifestation having reference to the acute or chronic nature of the hyperæmia, its depth, and its extent; and also in respect of the cuticle itself, which may be normal and healthy, or it may be abnormal and morbid. The general hyperæmia of the zymotic exanthemata, namely, scarlatina, rubeola, and variola, is followed by an *universal* state of desquamation: the corymbose exanthem of syphiloderma erythematosum is *general* without being universal; while the desquamation of a partial affection, such as erysipelas or ekzema erythematosum, is necessarily *partial*. In general and acute hyperæmia, the arrest of nutrition of the epidermis which determines its fall is sudden and extensive; hence the cuticle is thrown off or exfoliates in broad and membranous laminæ, and of a thickness corresponding with the region of the body in which the exfoliation occurs; the laminæ will be thin and pellucid on the trunk of the body and limbs, and thick on the palm of the hands and sole of the feet; and the size of the laminæ will be influenced by the thinness or thickness of the exfoliated layer, and, in some measure, by the conditions of the part and the treatment it may have undergone. It is no uncommon thing to find the cuticular sheath of a finger or of a toe, or indeed of the entire hand or foot, cast off after scarlatina, and, *ceteris paribus*, the size of the laminæ will be proportioned to the degree of repose, and probably to the neglect experienced by the patient. In chronic hyperæmia, the arrest of nutrition is irregular and intermittent, and the desquamation partakes of a similar character; the epidermis is no longer cast as a single and continuous sheath like the slough of a serpent, but is broken and subdivided, and takes a shape corresponding with the figure of the part on which it occurs, or assumes the shape of the inequalities of the morbid skin on which it is produced. Hence, time out of mind, dermatologists have distinguished, besides the *membranous* desquamation or exfoliation already referred to, a *furfuraceous* and a *farinaceous* desquamation, to which Hebra has added a modification of the membranous desquamation, namely, a *siliquous* desquamation.

Furfuraceous desquamation, derived from *furfur* and *fur-*

fures, bran, in other words, branny desquamation, is composed of particles which are compared to scales of bran, and the particles may be said to range in size from that of the finger nail, down to a minute, spangle-like, and micaceous film. Farinaceous desquamation, from *farina*, meal, or mealy desquamation, on the other hand, includes every form of pulverulent or powdery and amorphous disintegration of the cuticle; and may exist independently or may be associated with furfuraceous desquamation; in certain parts of the body where the skin is coarse you may expect to find the former; in other parts, as in the flexures of the joints, the latter form of desquamation. And siliquous desquamation, from *siliqua*, a pease-cod, is especially applicable to the desiccated oblong or crescentic domes of bulla and pemphigus.

Scales, in their nature, being portions of cuticle separated from its natural bed, may present some variety having relation to the degree of healthiness of the epidermis; if we produce an artificial bulla upon the healthy skin, the scale which will result from the separation of the bulla after its desiccation will necessarily consist of a fragment of healthy epidermis; the same may be said of the desquamation consequent upon the irritation of a blister, of the desquamation following the exanthematic fevers, erysipelas, pemphigus, and ekzema. It is possible that the scale may have been more or less completely saturated with the discharges which have exuded from the inflamed skin; but the cuticle itself is normal in structure, and none the less so because it is capable of becoming the medium of transmitting infection from one person to the other, as in the case of scarlatina. But the scale of alphos is not a lamina of healthy cuticle, it is composed of unhealthy and morbid cuticle; and so also is the exfoliation which is cast off from the mottled surface of phytosis versicolor. Hence, even a scale may afford material of observation that will aid us in the diagnosis of cutaneous disease. Place before yourselves the transparent crumpled film of a fragment of exfoliated cuticle; by the side of it the furfuraceous, glistening lamina produced by a chronically inflamed derma; and again, the morbidly composed and opaque shred of phytosis versicolor, or the elaborate, laminated and imbricated scale of alphos, brilliant in its snowy whiteness, and you will have under your eye structures that can hardly be regarded as the same, except through a knowledge of their source.

There are few things more striking in their contrast than the scales of alphos and those of chronic ekzema; the same may be said of the minute, shining, micaceous, bran-like scales that have given a name to pityriasis capitis, as compared with

the ragged, spongy, dull, and uneven films of phytosis versicolor. So that even the form of desquamation may help us to a diagnosis of cutaneous disease. If we apply this test to the so-called *lepra syphilitica*, we shall discover at once that the specific scale of alphas is wanting, and that the ragged exfoliation from the surface is in no wise dissimilar from the one which accompanies ordinary hyperæmia. We are led by these observations to the conclusion, that that which we call a scale is one while, nothing more than a separated or partially separated lamina of normal cuticle, continuous by its border with the rest of the cuticle; and, another while, like the scale of chronic ekzema or pityriasis, a lamina produced as a scale from its earliest formation, and separated by its circumference before it is set free from its central attachment.

The thickness of a scale is sometimes governed by the situation in which it is produced; sometimes by the formative energy of the inflamed part. The scales of pityriasis capitis are extremely thin and small, and are produced and rejected with remarkable celerity. In some forms of pityriasis, such as that which occurs upon the face of children, the desquamation is farinaceous rather than furfuraceous; in xeroderma it is amorphous, and in some parts farinaceous; on the palm of the hands and sole of the feet it consists of thick yellow laminæ of desiccated cuticle; and on the heel we have seen it assume the character of a rugged horny mass, three-quarters of an inch in thickness. The most remarkable example of desquamation is that which is met with in the pityriasis rubra of Hebra. The exfoliation is produced from every part of the body, the skin looks feathered with shreds, and in the course of a week, as much as half a pound of cuticular squamæ have been collected from the patient.

EXCORIATION of the skin is marked by the exposure of the derma or of the deep layer of the rete mucosum, by the removal of the epidermis; such removal being the consequence of abrasion, or effusion beneath its surface. The example which we have selected as the type of excoriation is lichen and prurigo, a papular eruption which produces so much itching that the nails are almost involuntarily brought into requisition, and the surface is more or less torn; but we might also have instanced the dry forms of ekzema, and especially ekzema papulosum and squamosum; the tubercles of alphas; the hyperæmia of knidosis or urticaria; the irritation of the acarus in scabies, or the neurotic irritation of pruritus.

Next to the excoriation produced by the nails we may instance the abrasions of surface which result from friction and some chemical substances, such as strong alkalis; and

the excoriations which are brought into view by the rupture of vesicles, the accidental wiping away of loosened cuticle softened by secretions; or the excoriated network of lines occasioned by the swelling of a portion of skin affected with ekzema. Where the excoriation is accomplished by the nails on an otherwise normal tissue, the tears of the surface are indicated by streaks, which are sometimes red and bleeding, sometimes black from the desiccation of effused blood, and sometimes brownish red from the formation of a linear scab or from the removal of such a covering. The excoriation in streaks, the unguual excoriation, is a sign of a pruritic state of the skin, and may lead us to the diagnosis of a prurigo, a pruriginous lichen, a lichen urticatus, a scabies, or a papular ekzema; we also look for the marks of the nails in alphos; while the small black scabs of prurigo and lichen urticatus covering the summit of abraded papulæ are a pathognomonic character.

In the abrasions formed upon the summits of the papulæ of ekzema, there occurs an oozing of a transparent colourless fluid; not unfrequently these circular abrasions have the appearance of holes in the skin, through which a watery secretion exudes; and, where a portion of cuticle of greater extent is removed from an ekzematous skin, the denuded surface is found to be coated over by a transparent, jelly-like blastema, the material of reproduction of a new epidermis or of a muco-purulent secretion. When dressings dry upon an ekzematous patch, their removal is very frequently accompanied with the production of these circular abrasions; and if the cuticle be already loosened, by excoriations of greater extent and irregular figure; and from both kinds of excoriation, blood is poured out or the viscous and transparent exudation already spoken of takes place. As in excoriation, there is no important lesion of the derma, and frequently none whatever, this form of injury heals up and disappears without leaving behind it a trace of its previous existence.

INDURATION of the skin, with or without thickening, and with or without implication of the subcutaneous tissues, is sometimes present on the surface of the body to a greater or less extent, and to a more or less limited degree. The pathological change in the dermal tissues is infiltration and condensation; and its active cause is defective nutrition. This kind of induration is very characteristically seen in xeroderma, in which the skin of the hands and feet, and sometimes other parts, resembles leather or parchment rather than skin. It is met with also in morphæa alba lardacea, wherein the infiltrated matter would seem to be a solid white substance rather than a

fluid, but comes before us most commonly in chronic ekzema. To such a form of ekzema we have given the names, sklerosum and verrucosum; and we have seen it most frequently on the back of the hands, on the shin, and on the forearm just below the elbow.

To a more inveterate form of induration of the skin the term skleriasis or skleroderma has been applied; and another form of induration associated with infiltration is met with in spargosis, and especially in bouknemia.

INCRUSTATION is a consequence of the formation of secretions on or in the skin, and the desiccation of those secretions, so as to create a temporary covering; and the crusts present a certain variety in accordance with their deep or superficial origin; the nature of the secretion of which they are composed and the rapidity of production of the secretion. Thus, they may be as *thin* as scales of epidermis, when they result from the desiccation of the transparent blastema, which is the first effort of restoration of an abrasion; or they present considerable *thickness* when their formation is protected by treatment or situation, when, for example, the secreting surface is left undisturbed; when the secretion dries upon the exterior, and so favours an accumulation beneath it; when the effused fluid is covered by the epidermis, or when it is retained *in situ* by the hair. We may remind you of the thin and almost transparent crusts which are produced on the excoriated surface of a ruptured bulla or phlyctis, and compare with this the thick mask of ekzema larvale or crusta lactea, the rugged crust of impetigo scabida, or the conical or oyster-shell crusts of rhyphia or rupia.

Crusts will be thinner or thicker, according to the degree of fluidity or inspissation of the fluids of which they are composed, and in some measure in proportion to their rapidity of production. Limpid fluids, besides containing less solid matter capable of concretion, will evaporate or dribble away from the exuding surface; denser and more viscous fluids will remain, will leave behind more solid matter when evaporation has taken place; and, having a longer time to desiccate, will fashion themselves into a protecting crust. Moreover, when the secretions are produced rapidly, they are carried away by their own impetus, whereas, when they are poured out slowly, desiccation and secretion go on simultaneously.

We have next to call to mind the material of crusts; in general it is blood, or lymph, or cyto-blastema, or pus; sometimes the secretion of the sebiparous glands and sometimes disorganized or altered tissue. Sometimes these products exist in a separate form; at other times they are mingled, and

occasionally may be produced alternately. The diverse composition of the crust will naturally occasion a difference in its colour; the sanguineous crust will be black, the lymph crust will present a shade of light brown, the blastema crust will be brownish and yellowish, the purulent crust yellow and greenish, the secretion crust grey or dusky-green, the tissue crust or scab, or eschar, amber-coloured or deep brown, or even black, and the crust of abnormal tissue, for example, that of the phytiform tissue, greyish or yellow. You will remember the little black, speck-like crusts surmounting the papulæ of prurigo and lichen urticatus; the thin and thick, dense and spongy lamellæ of ekzema ichorosum; the yellow crusts of ekzema pustulosum, which suggested to the Greeks the term *melitagra*; the greenish crust of ekzema larvale or crusta lactea; the grey and rugged and often fissured crusts of impetigo scabida; the grey and greenish or brownish crusts of rupia; the grey and brown and greenish concretions of sauroderma or sauriodes; the amber-coloured and black scabs of herpes zoster and variola; the black and enchased scabs of ekthyma and furunculus; and the greyish-white and sulphur-yellow crusts of phytosis tonsurans and phytosis favosa.

FISSION is a breach of continuity of the skin, and is a consequence of a previously existing infiltration and induration; hence, we might, if we chose to be hypercritical, treat of it as a tertiary lesion, as an accident consequent on a secondary condition. It is certainly one of the remarkable phenomena of the economy of the skin, that under the influence of hyperæmia, followed by infiltration and thickening, the skin is apt to become so brittle that it breaks, or cracks, or chaps with the greatest facility—that, in fact, the motions of a joint are sufficient to produce a rent or fissure extending through the upper strata of the derma, and sometimes more deeply. The most familiar example of fission of the skin that we can bring before you, is that of the chapped hands and wrists so common in the winter season. But a similar occurrence of *chaps*, the *rhagades* of the Greeks—from *ragas*, a rent or chink, and the *rimæ* of the Latins—is met with under other circumstances, as in chapped nipples, in fissures of the nostrils, the eyelids, the ears, the mouth, and the anus. Chaps are also seen in association with the tubercles of alphas and syphiloderma, in chronic ekzema of the hands and feet, the so-called *ekzema fissum* or *rimosum*, psoriasis palmaris and plantaris, and in syphiloderma palmare et plantare. In the palm of the hands and in the flexures of the fingers, the fissures are apt to assume the character of deep gashes; we have seen them in children, extending completely around the finger as though threaten-

ing amputation of the part ; while upon the tips of the fingers they assume a longitudinal direction, like rents produced by the over-distension of the tissues. In the case of the nipple, the skin is often very deeply divided, and the nipple appears to retain its attachment only through its bundle of excretory ducts.

ULCERATION is another example of a late secondary lesion ; it is a loss of continuity of the skin resulting from the removal of a portion of its tissues. It is circular or oblong in its form, with a well-defined and abrupt margin ; and sinks more or less deeply into the integument. Besides the common forms of ulcer of the skin, the acute, the chronic, the irritable, and the indolent ulcers, which belong to general surgery, we find ulcers sometimes developed in ekzema in association with varicose veins ; we have the ulcers of chilblains, of furunculi, of anthrax, and, in addition to these, the specific ulcerations, namely, the strumous, karkinomatous, leprous, and syphilitic ulcers. We must impress upon you the necessity of distinguishing between an excoriation, which is always superficial ; a chap, which is a mere fissure of limited depth ; and an ulcer, which presents an actual loss of substance ; although to a variable depth, sometimes as in serpiginous syphilodermata, merely sweeping away the surface of the papillary layer, and at other times, as in strumous, leprous, and karkinomatous ulceration, penetrating through the entire thickness of the integument, and reaching the subcutaneous tissues.

The features of interest in an ulcer are, its depth and extent, the condition of its edges, and the appearance of its base, with the kind of secretion which is poured out. Deep and extensive ulcers are often troublesome to heal ; the edges in a healing ulcer slope evenly down to its base ; they are neither too sharply defined, nor undermined, nor everted, nor swollen. The base of a healthy ulcer is roughened by growing buds or granulations, in which the processes of restoration are proceeding with active energy, rising evenly to the level of the surrounding surface, and linking, as it were, hand in hand, one border of the ulcer with the other. But the smooth, the red, the pale, the weeping, the dry, and the sloughing ulcer are all unpromising. The ulcer which creeps gradually outwards by its circumference, whether evenly or on one side more than another, must be looked upon with suspicion, and will probably turn out to be a specific ulcer, may-be strumous, or karkinomatous, or syphilitic. An ulcer which runs along rapidly by the circumference is commonly termed *serpiginous*, from *serpēre*, to creep, the equivalent of the Greek *erpein* ; sometimes it heals on one side as rapidly as it progresses on the other, and then we have before us a *horse-shoe* ulcer ;

sometimes its rapid destruction of tissue suggests the term *esthiomenon*, an eating sore like that of *lupus exedens* or *lupus vorax*; and sometimes the sudden disappearance of substance admits of being expressed by the word *phagedæna* from *phagein*, to devour.

CICATRISATION is a reparative process, and results in the production of a scar or *cicatrix*, the *oulé* of the Greeks. A cicatrix, therefore, is not a lesion, but the sign of a pre-existing lesion, and may be the index of a foregone wound or ulceration. Looked at a little more closely, we have not only the evidence of a reparative process but also of a reparative material, for the cicatrix is always distinguishable from the normal integument and can never attain the organization of the true skin; it is white and smooth, and often uneven; sometimes sunk below the level of the surrounding skin, sometimes raised unequally above it; sometimes thin and partially transparent, sometimes thick and opaque; sometimes soft and flaccid, but more frequently hard and tough.

The material of composition of a cicatrix is Nature's most abundant and simplest constructive element, namely, connective tissue, and connective tissue is massed together to supply the place of the lost skin; sometimes it is spread out evenly on the denuded bed and forms an uniform layer; but sometimes the regulating power is lost, and then it is accumulated in excessive quantity and in varied shapes, sometimes in the form of a ridge; sometimes in that of a tumour-like prominence; sometimes in cord-like bands, and sometimes in that of a reticulated web. Excess of connective material constitutes hypertrophy, that is, excessive growth; or hyperplasia, that is, excessive production; and has further received the name of false cheloid, *cheloides spuria*.

The healthy formation of a cicatrix will therefore be determined in great measure by the nutritive health of the individual, and in part by the local injury sustained. Where, from the existence of ill-regulated or unbalanced trophic power, there is present in the constitution a tendency to hypertrophy or atrophy, the cicatrix will exhibit a relative correspondence. Thus in struma, which is essentially a disease of defective and ill-regulated nutritive power, the false cheloid is a common occurrence; and another phenomenon connected with the same diathesis is the tendency to the breaking down and dissolution of the cicatrix after it has been completely produced.

If now, we look into the anatomy of a cicatrix we shall find it to be a layer of connective tissue, sparingly supplied with blood-vessels and nerves, and coated over with an epithelial layer corresponding with the corneous stratum of the

epidermis. There is no proper corium with its pars reticularis and pars papillaris; there are no sudoriparous and sebiparous glands; no hair-follicles, and there is no rete mucosum. While the process of connective-tissue formation is active, the cicatrix is more or less reddened in colour from the presence of an abundant capillary rete, but when the formative process is completed the capillaries are reduced in number, and the cicatrix is remarkable for its dull-whiteness, and at a still later period for a bluish tint. On close inspection a few red streaks, representing small venules, and sometimes minute arteries, may be found scattered from point to point, the venules taking their origin in a coarse network, and sinking here and there through the bands of connective substance into the subcutaneous tissue. This coarse vascular supply very probably represents the track of the few nervous filaments distributed to the structure, for of the presence of nerves we have frequent evidence in the sensibility of a cicatrix; generally it possesses but little feeling, but sometimes it is exquisitely sensitive.

One of the most remarkable of the properties of a cicatrix is its quality of contraction. Attached all around and continuous at its borders with the sound skin, and at the same time adherent by the rest of its extent to the surface on which it is formed, its contractile action draws from the circumference towards the centre, and the tendency of this contraction is to produce a puckering of the surrounding integument; and where the contraction is resisted, to draw the unresisting towards the fixed point. In extensive burns and scalds this property of the cicatrix sometimes gives rise to great inconvenience, and produces a contraction of flexible parts and of joints that ends in serious deformity; while on the other hand, in surgery, we make use of this known property of the cicatrix whenever we wish to tighten and contract the skin of a part, as, for example, in that form of dermatolysis of the upper eyelids which is commonly denominated ptosis.

The absence of rete mucosum is the cause of the want of pigment of the cicatrix; and a certain imperfection of formation of the epidermis, together with the absence of the papillary layer of the derma, is the occasion of its abnormal smoothness and of the tendency to laminated exfoliation and desquamation, which always exists on the surface of any cicatrix of considerable extent. And to the latter cause is likewise due the yellowish and horny tint which the cuticle is apt to assume.

And, now, gentlemen, we have to call your attention to a form of cicatrix, in which there has been no open sore, no ulcer, and no lesion of continuity, and yet the cicatrix is as complete as that which is dependent on those conditions. We

believe that we were the first to describe this form of internal cicatrix, and we propose to distinguish it from the common external cicatrix by the Greek term *ouloides*, signifying cicatrix-like. The *ouloid cicatrix* is met with in lupus, in syphilis, and in elephantiasis; and is the consequence of a disorganization and destruction of the skin, effected beneath the epidermis, and without interference with the epidermal membrane.

The pathological process in operation in the destruction of tissue now referred to must be termed degeneration; the tissues, in consequence of defective nutrition, recede from their complete and perfect standard, and go through the stages of a retrograde metamorphosis which reduces them to the condition of a gelatinous substance, a substance similar to that of the cellular tissue of the embryo. All the tissues participate in this retrograde metamorphosis, the vascular tissue, the nerve tissue, the muscular tissue, the gland tissue, and the various forms of fibrous tissue, and all are reduced to one common gelatiniform substance. But the gelatiniform tissue is a substance of low vitality, endowed with incomplete life, and possessing an imperfect form; hence it becomes subject to those laws which direct the removal of useless and intrusive material; and, incapable of resistance, it is gradually absorbed and removed, leaving behind it the traces of destroyed substance which are met with in common cicatrix.

The first time a case of lupus non exedens presents itself before you, examine with care those tubercles that seem to be composed of a drop of yellowish or salmon-coloured jelly effused beneath the epidermis, that tempt you to puncture them, but being punctured yield no fluid matter; that are not unorganized, for one or two minute blood-vessels may be seen straggling through their mass. But look around them, or rather behind them, and observe the devastation which they, or rather a similar manifestation, have committed: the papillary layer of the derma gone, the reticular structure of the corium brought into view, the reticular spaces filled with the same gelatinous substance, the glands and follicles destroyed, the rete mucosum lost, and only a thin and smooth, desquamating, unhealthy-looking, and horny epidermis left to cover the scene of destruction. The pathological process is somewhat similar to that of the operation of potassa fusa on the skin; the surface is gelatinized, then removed by absorption; we look, and behold the papillary layer of the derma is gone, and the upper stratum of the reticular layer is brought fully into view as though by a process of dissection; or, may-be, the dissolving action has sunk deeper, and a coarse reticular network exhibits the deeper portion of the corium.

Take another example of the ouloid cicatrix as it affects the nose in lupus erythematosus, or the scalp in the same disease. On the nose, when the absorption has been superficial, every sebiparous gland surrounding the hair-follicle like a chaplet, is brought into view as clearly as if the surrounding tissue had been dissolved away and rendered transparent by a chemical process; while on the scalp the disorganization has sunk to the fundus of the follicles, and they, together with the hair-bulbs, are destroyed. A similar pathological change is seen in one of the varieties of sykosis.

The pathological identity of lupus non exedens and lupus erythematosus is proved by this similarity of organic change, and a pathological relationship is, by the same observation, set up between lupus and syphilis, and both these diseases with elephantiasis Græcorum. In tertiary syphiloderma, it is no uncommon thing to find transparent-looking tubercles which disappear under the influence of treatment, and never having broken or ulcerated, leave behind them deep pits of the ouloid cicatrix. The material composition of the syphiloderma gummatum is similar to these, and so also are the semi-transparent, œdematous-looking tubercles and blotches of elephantiasis.

We must also direct your attention to those remarkable ouloid markings of the skin which have received the name of lineæ and maculæ atrophicæ, or false cicatrices. In these the appearance and structure of the cicatrix are identical with common external cicatrix, but there has been no external solution of continuity. Some, as the lineæ atrophicæ matrum et hydropicorum, are referrible to distension without corresponding growth, but others are met with in which this explanation is untenable. You will find some interesting cases of this affection narrated in this journal, pages 140, 209; and we may add to those cases the remark, that the best example of maculæ atrophicæ that has come before us occurred in a man suffering under elephantiasis Græcorum.

DISCOLORATION, or abnormal pigmentation of the skin, follows as a sequela several forms of hyperæmia, and consequently possesses the characters which properly belong to a secondary lesion. We may instance the black stain or melasma which is apt to succeed to a burn, whether produced by the action of the sun or by fire; the melasma left upon the skin by a blister; by the irritant action of an eruption of alphas; or by the similar action of a syphiloderma. When these discolorations are greenish in hue they become entitled to the term chloasma; and when their tint is yellow they con-

stitute phakia or lentigines, or xanthochroia. In the series of secondary lesions, however, we must confine ourselves to the consideration of discolorations, that is, abnormal pigmentation, produced directly by hyperæmia, whether such hyperæmia result from an external or an internal cause. In some few instances, as in ephelis, the excessive pigmentation follows the exciting cause so directly that we cannot doubt the relation of the discoloration to the hyperæmia; this is the case in the instance of true sun-burn, the ephelis solaris; in the fire-burn, ephelis ignealis, that we meet with so commonly in France, on the thighs of women, from the use of the brazier; and in those curious examples of xanthochroia which are sometimes seen on the legs, just above the ankle, from a hyperæmia due to varicose veins. In other cases, for example in ephelis gravidarum, and dysmenorrhœalis, the hyperæmia is so little defined or so transient that we are induced to refer the abnormal pigmentation to the group of primary lesions. In melasma arsenicale we perceive few signs of hyperæmia, but nevertheless we have good analogical grounds for the belief that the morbid pigmentation is preceded by capillary congestion; and in this respect melasma arsenicale differs from melasma argenteum or argyria, in which the morbid coloration is due to an attempted elimination of the remedy and the oxidization of the metal in the tissues of the skin.

HINTS AS TO THE TREATMENT OF SCARLET-FEVER. By R. S. Sisson, M.D.

MILD and uncomplicated cases of scarlet-fever may be safely left to the nihilisms of the globulists, or to the expectations of the natural-historical school of medicine. But some cases of this disease will test to the uttermost the whole art and science of medicine.

To the gravity of scarlatina anginosa and maligna we are indebted for so many quasi-specifics in the treatment of scarlet-fever. One remedy, however, stands out in bold relief from among the rest, and that remedy is ammonia.

But ammonia is not a remedy for scarlet-fever, unless the how and when of its administration are fully understood. Given haphazard, it may become worse than useless.

My intention is not, however, to teach to what cases am-

monia is suited, but to point out a not unfrequent cause of disappointment in its use.

During the years 1863 and 1864, I had to treat a good many severe cases of scarlet-fever, all of which did well under the ammonia treatment.

In consequence of my having reported this fact in one of the leading medical journals—the *Medical Times and Gazette*, as far as I remember—I was brought into communication with several of my medical brethren in the provinces, where scarlet-fever was then prevalent. One gentleman, having followed my directions, thus wrote :—“I have not found the ammonia treatment better than any other. When the wind is in the east, all my cases do badly.” This gentleman was evidently an acute observer ; but I expect he was not aware how the east wind and his want of success came to stand to each other in the relationship of cause and effect. Let us try to solve the problem.

In the spring of 1865, during bad weather, I had under my care a male child, aged one year and ten months, suffering from scarlatina. The case did badly from the beginning ; the urine became early albuminous ; dropsy followed ; and the child died in convulsions.

On the appearance of albumen in the urine, I ordered ten grains of compound jalap powder, and I increased the dose rapidly up to *one drachm*, but without any effect. There was no obstruction of the bowels, as the little patient passed from time to time hardened fæces. The drug was not in fault, for the father of the child having, at my suggestion, taken a drachm, was purged violently. Now the question is—How was the compound jalap powder disposed of ? The child did not vomit, so it was not lost that way. That it was given to the patient I have no doubt, from my previous knowledge of the mother. If the stomach had been healthy, some of the drug must have been absorbed, and acted as a constitutional purge. If it had passed into the bowels, unless these were coated with viscid mucus, it must have acted as an irritant cathartic. Perhaps the next case may throw some light upon the subject.

On the 16th of April, 1865, shortly after the death of the child whose case I have above related, I was called in to a boy, aged seven. I found him suffering from scarlatina anginosa, and ordered two grains of ammonia in half an ounce of water every three hours, with milk diet. Next day, in addition to the above, I ordered port wine and beef-tea.

On my third visit, April 18th, I found my patient much worse, in fact sinking rapidly. He had obstinately refused

the port wine and beef-tea, and had taken his medicine irregularly. His mother showed me a wash-hand basin containing a quantity of milk which smelt strongly of ammonia. This she told me he had just brought up, and it seemed to be the whole of what he had taken since the commencement of his illness. In answer to questions of mine, she stated that he had drunk two pints of milk, and had taken three doses of his medicine on the first day, four on the second, and one this morning (the 18th). According to her statement, then, he had swallowed two pints, four ounces of liquid. On measuring the contents of the wash-hand basin in a child's half-pint mug, I calculated it to be about a couple of ounces short of two pints.

At my next visit, in the evening of the 18th, I found the boy dead. Permission could only be obtained to examine the stomach, on opening which it was found to contain a small quantity—three ounces, by graduated glass measure—of a turbid, milky fluid, having a strong ammoniacal odour. The pyloric orifice was plugged, and the stomach lined throughout with a layer of thick, tenacious, slimy mucus.

In this case, then, the scarlatina was complicated with acute catarrh of the stomach; and I have no doubt that the same morbid appearances would have been found in the other child had I been permitted to examine its viscera.

Allowing for the rough measure of the half-pint mug, and for some of the vomit shed on the bedclothes, I think we are enabled to state as a fact, that not a particle of the milk or medicine taken by the patient was disposed of in the way of absorption.

In scarlet fever, then, complicated with acute catarrh of the stomach, we must have recourse to the mineral acids, because the tenacious alkaline mucus, with which the stomach is lined, is not acted upon by alkalies, and this treatment may be continued throughout, or changed for ammonia, when the catarrh is subdued.

“Acute catarrh of the stomach,” says Dr. Chambers (Clin. Lect.), “like all other catarrhs, is excited by external and often by epidemic influences.” This, then, is one reason, at least, why cases of scarlet fever do badly when the wind is in the east.

ON BURMESE RINGWORM. By EDWARD NICHOLSON,
Assistant-Surgeon, Royal Artillery.

THE disease generally known in India as the Burmese Ringworm (in Hindustani *dâd*), is a variety of *Herpes circinatus** generally confined to the sea-coast of India and very common on the two western coasts, Malabar and Burmah, especially the latter. It is not nearly so common on the eastern or Coromandel coast, and is very rarely met with inland.

It attacks both Europeans and natives, and rarely disappears spontaneously; if not treated, or if it prove rebellious to treatment, it will often last for years. I know of a medical officer who has had it on and off for sixteen years, and I have myself suffered from it for two years and a half.

It would seem to be a parasitical disease, caused by a cryptogamic growth which finds a favourable *nidus* in certain individuals constitutionally predisposed to it. I have not had any opportunity of making a microscopical examination, as any scientific instrument more complicated than a stethoscope is decidedly rare in India; but the cure of the Ringworm by those agents generally destructive to cryptogamic vegetable life would seem to point to a parasitical origin. It is not contagious; of this there is nearly positive proof; its general situation on the groins would, if it were contagious, render transmission of the disease between the sexes of frequent occurrence; yet I know of several cases where the disease has

* The cases of Burmese Ringworm which have fallen under our notice in London, and have been imported from India, were evidently examples of *Eczema marginatum*. The same disease is also met with occasionally in this country. Its supposed cryptogamic origin is altogether unfounded. It is obstinate; owes its origin to the heat engendered by the contact of the scrotum and thighs, especially in the damp heat of Burmah, and requires for its cure strong stimulant applications, such as those pointed out by the author; and the internal administration of arsenic. Hebra finds this disease common among cavalry soldiers, in whom the heat and chafing of the saddle are the exciting cause.

The "Goa" powder spoken of further on appears to be the ash of some plant; it is imported into Goa, the capital of Portuguese India, from the Brazils. The "poh de Bahia," also much used in India, appears to us to be the same substance. The way the powder is applied is to take it up with the cut surface of a lime, and rub it well into the eruption.—EDITOR.

existed in this situation for many months in men, without transmission to the women with whom they cohabited. The cause of the ringworm is obscure. It certainly has a great affection for the western coasts of India, where the rainfall is great; the cultivation consists entirely of rice, and the amount of moisture in the atmosphere is considerable. It generally appears during the rainy season of the south-west monsoon. The disease is said by some to be owing to impure water, but, as it is easier to abuse water than to analyze it,* I think we may fairly set this reason aside, as in the case of most Indian diseases ascribed to the same source. Moreover, I have seen several cases of the disease produced in people who used for bathing and drinking a water which gave me, on analysis, the following results:—

WELL-WATER, CALICUT, *September*, 1863.

Chloride of Sodium	0·26
Silicate of Alumina	0·07
Organic matters	0·13

0·46 grains per gallon.

Here is a water giving hardly any residue on evaporation. It is, in fact, rain-water, and in Malabar generally the water corresponds very nearly to this standard. Indeed, its purity is so excessive that it is devoid of taste and does not quench thirst effectually.

The disease does not proceed from want of cleanliness. The people of Malabar are the most particular of India in their ablutions, so much so that a Tier servant always bathes on coming home from market, to cleanse himself from any accidental contact with pariah people in the bazaar. Neither does temperance or intemperance, plethora or the opposite condition, seem to have any effect in causing the disease. Whilst in Calicut, where I contracted the disease, I bathed twice daily in the above-mentioned water, and I rarely drank any liquor; my usual drink was water, carefully filtered through sand and charcoal.

* With the exception of a few analyses I have myself made, I do not believe that there exists a single reliable analysis of any Indian water. I commenced a series of analyses of the waters of Calicut, Bangalore, and other stations; but, in the absence of any assistance from Government, I was unwillingly obliged to leave the great work of the analysis of Indian waters hardly begun.

Neither has the disease any connection with secondary syphilitic eruptions.

The ringworm may break out on any part of the body; in women it does not affect any part specially, but in men it nearly invariably begins on the groins. It would therefore seem that whatever be the predisposing cause, the apposition of the scrotum and thighs in a hot and moist climate is the most frequent exciting cause. It is much more frequent in men than in women.

It generally appears on both groins, and spreads symmetrically on both. A vesicle appears on each groin; this is scratched, it spreads, and by the time that the irritation has become sufficient to excite attention, the patient finds a pretty accurate outline of his scrotum delineated on each groin by a crescentic wheel formed by coalescing vesicles. These discharge much serum, and spread excentrically from the scrotum, undermining the epidermis as they proceed. The parts they leave remain sound until a fresh nucleus of vesicles forms about an inch in rear of the advancing crescent; the vesicles spread in a curved form, and by the time the disease has made some progress, the groins will be covered in a radius of five or six inches with concentric rings, or rather crescents of the raised line of vesicles.

The disease, if not checked, soon spreads round to the nates, and the patient finds himself unable to sit down, or to ride, and the swelling of the adjacent surfaces of the thighs renders walking very painful. Small irritable ulcers form on the nates at this period, and patches of ringworm break out on the legs, and more rarely on other parts of the body, the armpits and neck being generally the only parts of the upper part of the body attacked. The patches on the legs often degenerate into painful and irritable ulcers.

This state of things will go on for months, if unchecked, but the constitutional irritation soon becomes very great, and the sufferer, unable to sit or to stand, and exhausted by loss of sleep, becomes crippled for any exertion, and lies in a long chair covered with wet clothes, to try and soothe the intolerable itching. At night the irritation is more intense, and no resolution can prevent the patient scratching the vesicles.

Treatment.—The indications are to apply alterative applications externally, or such remedies as are used in the treatment of other parasitical skin diseases. A favourite remedy at Bombay is the Goa powder, but I have had no opportunity of examining this substance.

I have heard of gunpowder being efficacious, also a mixture

of gall-nuts, salt, and sulphur; but from experiment I find that sulphur has but little effect on the disease, and that the benefit of these remedies must be due principally to the other irritating substances they contain.

The native remedy generally used is the bruised leaves of the *Cassia alata*, in Hindostani, *dâd murdân*; in Tâmuel and Malayâlam *shimiâgati*. The pod of this tree is of a very peculiar shape; it has four deep furrows, so that its section is in the form of a cross. The bruised leaves yield a juice which is most refreshing to the inflamed skin, and affords great relief when a bad fit of the disease is on. It will often cure mild cases of the disease, especially if rubbed in with salt.

I have tried nitrate of silver, both solid and in solution, but without favourable results.

Tincture of iodine, alkalies, tar, red oxide of mercury, turpentine, corrosive sublimate, have all been used, and I have seen cases cured by them, but in severe cases all are liable to fail. The remedy I have found the most useful is the strong nitrate of mercury ointment; with it I have cured all the cases I have come across, excepting one, and that is my own. I have tried on my own person every remedy that offered a chance of success, many with great temporary benefit, but I have always had to return to the nitrate of mercury ointment. By it I keep the disease down, and have often been free of it for several weeks at a time, but in three or four days after I leave off the remedy, an itching in the groin, and a small crescent of vesicles warn me to begin again.

Of all these remedies the best, in the order of their value, are, nitrate of mercury ointment, bichloride of mercury and tar.

I cannot say that change of climate is of any benefit. Change from Malabar to the hot, dry atmosphere of Central India failed to do me any good; and since my return home, four months ago, I have had some very bad fits of the disease. My legs had been quite free of the disease for about a year, until July last, when in the Mediterranean, not far from Malta. Then a patch appeared on the outside of the left leg; it gives but little trouble, but is very obstinate. My present treatment is as follows:—

Nitrate of mercury ointment at night. In the morning I apply a solution of bichloride of mercury, sixteen grains to the ounce. An alkaline bath every other day. Internally I take bicarbonate of soda; and I live very abstemiously, so much so as to lose a pound weight every week.

Experience teaches me that I cannot do anything better, and I hope that perseverance will yet be rewarded by a cure.

Perseverance is certainly required, and a frequent change of remedies. Two months ago, nitrate of mercury ointment failing to relieve me, I found great relief from the application of Wright and Francis's alcoholic solution of coal-tar (an excellent and convenient preparation in the treatment of many skin diseases, especially ekzema). Under it the ringworm gradually receded, but a fresh attack springing up in the centre of the old ground, I was, after a fortnight's use of it, compelled to resort to bichloride of mercury. This succeeded admirably for two or three weeks, the old ringworm cleared away, but only to be succeeded by a fresh crop, which defied the remedy, and I have, for the twentieth time at least, been obliged to fall back on the nitrate of mercury ointment. None of the remedies I have used have had more than temporary success, and I feel that, as is the common opinion in Burmah in inveterate cases of the ringworm, it is a trial of patience betwixt the disease and the sufferer.

ON THE FILARIA MEDINENSIS, OR GUINEA-WORM. By T. H. BARTLEY, M.D. Bristol.

DURING the summer of 1853 I attended a gentleman suffering under chronic disease of the liver; he had arrived in England a short time previously from Acra, in the Bight of Benin, where he had carried on a trade in palm oil, elephants' tusks, and gold-dust for seven years. He informed me that he had frequently been attacked by the *Guinea-worm*, and pointed to several spots in different parts of his body, which he suspected as the abode of these animals in a quiescent state. On my remarking that there was no external swelling or other indication of their presence, he informed me that it was only when near the surface that any swelling became evident; that the first symptom was intolerable itching, which induced scratching, and subsequently a small "boil" made its appearance, which suppurated and burst; and through the wound the head of the animal was thrust forth. He then described the mode adopted by himself and

by those infested with this animal of extracting it, namely, by first tying a piece of string round the projecting part, and drawing out carefully as much of the body of the animal as possible, and winding it round a small piece of stick, which is kept in place by pieces of adhesive plaister. This operation is repeated daily till the whole worm is removed. He informed me that it required sometimes weeks before the entire animal came away; and that, unless great care were taken in extracting it, it would break off, when violent inflammation would ensue, accompanied by fever and other evidences of general constitutional disturbance, which sometimes ended fatally.

This account agrees exactly with those given by authors who have written on the subject. He showed me cicatrices about his legs of wounds produced by worms which he had extracted and preserved, and which he gave me. They were dried, and looked like shreds of catgut; indeed, they had been preserved by my patient only as mementoes of the pain which he had endured; and, being merely put up in a paper packet, in the same way as we who are fishermen carry gut collars in our fly-book, they really appeared to possess no sort of interest beyond the fact of their having been drawn out from the cellular tissue of the human body. There was nothing about their appearance to indicate their character, and I placed them in my pocket-book, in the envelope in which I had received them, not expecting that they would afford me any interest. Being anxious, however, to ascertain their structure, I put them in weak spirit, and in the course of a few days they gradually swelled out and assumed the cylindrical form, of about the thickness of a thin wax vesta. I cut off about the eighth of an inch of one of these for microscopic examination. The external skin or envelope I found perfectly transparent, and transversely striated; and, on pressing it, a pellet of white, grumous-looking matter was extruded, covered by a thickish envelope, which I believed to be muscular fibre. The pellet, on being broken down with a needle and placed between two slips of glass with a drop of water under a $\frac{1}{4}$ -inch lens, presented one compact mass of organized beings, or wormlets, varying somewhat in size, and measuring one-fortieth to one-fiftieth of an inch in length, by one-thousandth of an inch in breadth. These wormlets were mostly cylindrical; some, however, appeared flattened, like the tape-worm. At least two-thirds of the length of the body is of uniform size, the cephalic end is slightly rounded, and a distinct opening or mouth is visible; the other end terminates in a long, fine point, to which the body, from the end of

the middle third, gradually tapers. The muscular envelope appears to answer the purpose of an intestinal canal, besides forming a part of the locomotive organ of the animal.

Having failed to find in any of the works which I consulted any account of the internal structure of this animal, I began to think that I had discovered something which had never been noticed before, until I accidentally came upon a description of it by a M. Jacobson, of the Academy of Sciences of Copenhagen, in a letter addressed by that gentleman to M. de Blainville. The letter is dated Copenhagen, 10th February, 1834, and is to be found in the third volume of the *Annales du Muséum d'Histoire Naturelle*. Its substance is as follows:—

I have among my patients a boy of thirteen or fourteen born on the coast of Guinea, where his father, the brother of the celebrated philosopher, Steffens, had been governor. The boy, after the death of his parents, left Africa in the month of March last year; and, after a very short visit to the West Indies, came here at the beginning of last October.

About the early part of December he complained of pains in the inner ankle of the right leg, and an abscess formed there. I then saw him. The abscess had burst, and a servant had drawn from it a piece of filaria of the thickness of strong pack-thread, and about an inch long.

The boy only speaking the Oka language, which we were all ignorant of, and only knowing a few Danish words, we could only learn that in Guinea a worm had been already removed from his foot. However that may be, the inflammation, which was very severe round the abscess, having ceased, I examined the foot daily, and discovered that under the skin of the dorsum of the foot there was a *Filaria Medinensis*. I made a slight incision at a spot where there was a slight projection, and I found the worm. I then held it, and tied it on a piece of wood, which I made to turn on its axis in such a way that in a few days, by continuing this manœuvre, I completely extracted it. It was about an ell long and half a line in thickness. Its colour was quite white, the skin smooth, the two extremities slightly pointed. The pain soon ceased, and the wound healed in a very short time. Subsequently the abscess on the inner ankle degenerated into an ulcer of a very severe character. The boy did not complain of pain, and could walk easily; but some few days after, he began to suffer again. I examined several spots which I thought suspicious, and I at last discovered on the tendo achillis a swelling formed by another worm.

I made a slight incision, and the animal protruded itself through the wound. On examining that part which had come through, I remarked that the lancet had made a little opening in the body of the animal, and that a white matter oozed from it; but that which astonished me the most was that the worm became empty, and that the case or body collapsed. After having

attached the animal to a piece of wood, I cut a piece of the projecting part, and carried it home to examine with the microscope. Imagine my astonishment when I found that this white substance which I took for eggs consisted of an innumerable quantity of lively wormlets, which moved about with extreme vivacity. They are cylindrical, quite transparent, the skin under certain aspects is wrinkled or semi-articulated; one of the extremities of the body is slightly attenuated, rounded, and obtuse; the other ends by an extremely fine point, straight, and the length of about half the body. The animal rolls itself up into a spiral form, like the *trichocephalus*; but it is almost inconceivable with what an enormous quantity of wormlets it is filled, without, as far as I have been able to find, any trace of a viscus in which they are inclosed. This having astonished me so much, I proceeded to examine the worm which I had preserved in spirit. To my surprise, by making incisions at different points, I pressed out a mass of these same wormlets, so that I think that the entire body is full of them. I have renewed my observations to-day by extracting a fresh portion of the worm. The wormlets which I squeezed out lived many hours in a tube filled with water. Are these, then, the young of the animal? But, then, what an immense number! or—and I scarcely like to ask the question—is the animal simply a tube or case filled with wormlets? I will continue my investigations; in the meanwhile I send you a specimen. Put them into a drop of water, and you can more easily examine them. In the middle you will find a piece of the animal from whence the young ones are removed, and which I have seen alive to-day. Perhaps you may have in your collection some of these dragonneaux. Examine these and give me your opinion about them. But I should like you to write to Mr. Clot, of Alexandria, and ask him to endeavour to extract a worm from some healthy African, to examine it with the microscope, and to tell us what he finds. The examination should be made carefully, the thing being, as I think, curious as it is important. I beg you will communicate these observations to the Academy.

The following is a letter from the same gentleman, dated Feb. 14th (four days later). He begins—

I send you a supply of my young filariæ; one tube in which they are preserved in a neutral solution of chromate of potass; another in spirit, and a slip of glass, on which are some dry. I hope this parcel will reach you safely, so that you may be able to examine these curious animals. Those in spirit lived in water more than fourteen hours, and were very lively. The blunt part is the head, the pointed part the tail, which seems to be harder than the rest of the body, though it is flexible up to a certain point. There appears to be an intestinal canal, which takes on, in some individuals, the form of a spiral or screw. The skin, as I told you in my former letter, exhibits in some positions wrinkles or circular folds, so distinct as to cause the body to appear, in some instances, articulated. These wormlets have been already noticed by M. Lichtenstein, when examining some animals which are

in the collection of the celebrated ichthyologist, Bloch, of Berlin. Rudolphi speaks of them in his "Synopsis Entozoorum," page 206. His description of their enormous quantity is very exact. He says, "*Filariæ nostræ prole quasi farctæ sunt: quod si harum longitudinem illius vero minutiem spectas, foetuum multa millium millia singulis tribuit.*"

You cannot form a notion of the enormous quantity which a single drop pressed from the body of these worms contains. They have not been observed in the living state by any one but myself. But where do such a quantity of young ones come from and go to? "*Quo abibit proles illa? an ab homine homini communicatur? an alibi conservanda demum hominem via incognita petens?*" asks Rudolphi, p. 207; so that the history of these animals is still obscure. It would be worth while to send out a physician to Algiers or to M. Clot, with the necessary questions, to which he would readily find a response. I am especially curious to know whether the animal pierces the skin in order to come out; whether we find animals without the young ones, and whether they exist in other parts of the body besides the feet. There are other species which are viviparous; Rudolphi has noticed this to be the case with the *Filaria furca* and the *Filaria sanguinea*. I shall try to study some specimens of *filaria* which are abundantly found among fishes.

At the end of the letter there is a description of some plates, in one of which he figures the young animal with two mamelons or nipples, which he places at the junction of the middle with the posterior third of the body. I have failed to discover any such appendages, and I can only attribute the fact of their being figured to this, that, having proved them to be viviparous animals, Mr. Jacobson considered that the process of suckling was a necessary part of their economy, and so manufactured a nipple for them. I have examined hundreds of them to find this mamelon, but without success.

The *Filaria* belongs to the class *Cœlemintha*, of the sub-kingdom *Nematoneura*, of the *Entozoa*, being classified by Owen with the *Ascarides*, *vermicularis*, and *lumbricoides*. The *Strongylus Gigas*, the *Spiroptera hominis*, and the *Trichocephalus Dispar* (*Cæcum*). It is described as varying in length from six inches to two, eight or twelve feet, round and sub-equal, decreasing slightly towards the extremities. The mouth is orbicular, and surrounded by three slightly raised swellings, which are continued a little way along the body and gradually lost.

The body is traversed by two longitudinal lines, corresponding to the intervals of the two well-marked fasciculi of longitudinal muscular fibres. The caudal extremity is obtuse, and emits a single spiculum. Owen speaks of the tail of the female as being acute and suddenly inflected. The animal is endemic in the hot regions, both of the Old and New world.

The name Medina-worm or Guinea-worm has been given to it from the places where it has been particularly observed.*

Amidst so much conflicting opinion it would be indeed presumptuous in me to offer mine. I am inclined to think, however, that, although so much disagreement exists as to the origin of the animal, but little can be entertained as to the cause of the irritation which a rupture of the worm by incautious extraction would occasion. Imagine myriads of these *little* wormlets performing their agile movements on the surface of an inflamed sore, and it is not difficult to conceive that the irritation thus occasioned must be frightfully severe.

The question is asked by Mr. Jacobson, or rather by Rudolphi, what becomes of these myriads of animals? To solve it is, I confess, far beyond my powers. It is, however, my intention to keep the subject before me, and whenever an opportunity occurs, which it may do now that our trade with the African coast is increasing, to endeavour to gain some further information respecting this animal. I may mention that there are two other species of filaria found in the human subject—one the filaria oculi humani; another, the filaria bronchialis, found in the bronchial glands.

The filaria oculi was first discovered by the Russian physician, Dr. Nordman, of Odessa. On examining an opaque crystalline lens, extracted by Gräfe, and partially covered by its capsule, Dr. Nordman detected in the Morgagnian fluid two minute convoluted filariæ. One of the two had been wounded so that the intestines protruded from the body, and appeared like fine threads. In a lens extracted by Dr.

* The origin of this animal is now, as it was in Rudolphi's time, a matter of debate. Some think that it is a true *Gordius*, which insinuates itself in the skin of persons who walk barefooted; others think that it is a true *entozoon*, and they state as a proof that it is never found out of the body; that it is altogether like other species, and especially that which attacks the ape; that it is developed in the very structure of a part; that it can exist there for months, and even for years, without causing any appreciable annoyance; and that it is only when it comes near the surface that it occasions pain. Rudolphi inclines to this opinion.

Some have expressed doubts of its being an animal at all; asserting that it is merely dead cellular tissue, which moulds itself, so to speak, into the form of a worm. This, however, I think we have clearly demonstrated to be incorrect. Some writers have supposed the Guinea-worm to be the larva of an insect; but as no one has ever seen this insect, and as the filariæ are met with both in animals and fish, Bremser rejects this opinion as altogether untenable.

Jungker, Dr. Nordman afterwards found a living filaria $5\frac{1}{2}$ lines long. The filaria medinensis has occasionally been met with beneath the conjunctiva as well as in the subcutaneous cellular texture of the scrotum. Filariæ have been found in mammalia, birds, and fishes; they occur also in the invertebrated animals, particularly in the larva of Lepidoptera and in some Coleoptera.

Dr. Bellingham, who has written on Irish Entozoa in the *Annals and Magazine of Natural History*, describes four species of filaria which he has met with among animals, namely, the filaria attenuata, which he has found in the cellular membrane of the abdomen of the peregrine falcon; another kind in the peritoneal cavity of the red gurnet; a third in the peritoneal cavity of the mullet; and a fourth in the abdomen of the bee.

Even within the tropics different districts suffer from the filaria in different degrees. Thus it is endemic in Senegal, and comparatively rare at Congo and Angola. Dr. Joy states that it sometimes prevails in a truly epidemic form, and relates the following in proof, as recorded by Sir James McGregor:—"The 86th Regiment, while at Bombay, was quite free from disease till after the setting in of the monsoon, when it had no less than 300 men attacked. The 88th Regiment replaced it in the garrison at Bombay during a period of two months, and then embarked. Out of 360, 161 were attacked while at sea with it." In Egypt, M. Clot mentions that it has been much more common since the Ethiopians have been largely incorporated with the Arab regiments.

Kier thinks it is introduced into the body through the medium of the rain and certain winds. Heath remarks that it is rarer among the officers than common soldiers and those who occasionally lie on the ground, or go with their feet or arms naked. Those who imagine that the swallowing of stagnant water, supposed to contain its ova, is the source of its introduction into the body, have yet the difficulty to get over as to how it reaches its destination—whether by slow interstitial absorption or by perforating the coats of the intestinal canal, and so finding its way to the extremities.

NOTE BY THE EDITOR.—Dr. Edward Waring, in a paper read before the Medical and Chirurgical Society in June, 1867, states the disease due to filaria medinensis to be endemic in the zone of climate ranging between 23° or 24° North and 12° South latitude. It is more prevalent at certain seasons than at others, and in certain places; as,

for example, when the soil consists of secondary trap, while it is rare in the alluvial and laterite soil. The mode of admission of the worm into the body is unknown, but however introduced, it has a period of incubation of twelve months; it is more or less migratory under the skin; is generally solitary, but sometimes more numerous,—in one instance fifteen were observed; and has a tendency to make its exit by the lower extremities. Occasionally it fails to be excreted, and then it dies and remains buried in the tissues, or is converted into a calcareous mass. When excretion is attempted, a serous bulla is observed near the ankle; its contents are transparent at first, then turbid, and afterwards reddish; the bulla may enlarge to the size of the segment of a walnut. When it bursts an excoriated surface is brought into view, with a white point in the centre—the head of the worm. At other times an abscess is formed, from which portions of the worm, or the entire animal may be expelled; and at the base of the abscess a round hole may be detected leading to the fistulous burrow of the creature.

A writer in the *Times* newspaper, under date August 31, 1867, observes—

There has never been any difference of opinion, either among Hindoos or Europeans, that the source of the disease is in the water itself, and is caused by drinking or bathing in the water of tanks or water holes which contain the microscopic embryos of the worm.

It has always been held that in localities where the worm prevails the only certain immunity from its attacks is to use no water, either for bathing or drinking, which has not been previously boiled.

Stations have been abandoned in India on account of the prevalence of the worm in its tanks and wells—for example, Matoonga, the former headquarters of the Bombay Artillery, was abandoned for this sole reason, and the ruins of the barracks for European soldiers, of the officers' bungalows, and the Fives (the abandonment of which must have involved great public and private loss) are still to be seen among the plantations.

Between 1850 and 1855 I was one of the visiting justices of the juvenile reformatory (called the School of Industry) at Sewree, in Bombay. The children suffered much from Guinea-worm, and Dr. Carter, a scientific medical officer, who was an experienced microscopist, and at that time secretary to the Bombay Branch of the Royal Asiatic Society, was requested to try whether, by microscopic examination, he could not ascertain whether the water of a tank contained the embryos of Guinea-worm or not.

He read a paper on the result of his investigation, which was published in the "Proceedings of the Royal Asiatic Society" at Bombay. He succeeded in identifying the embryo of the Guinea-worm in the form of a microscopic worm, with a peculiar caudal appendage of a diameter considerably less than that of the pores of the human skin, and he found that such embryos were

exceptionally frequent in the tanks of Matoonga, Sewree, and other localities where the worm was notoriously present.

Burnes, in his account of Bokhara, remarks that the Guinea-worm is frightfully prevalent there, and is attributed to the badness of the drinking water; it is spoken of as the disease of Job.

STATISTICS OF CUTANEOUS DISEASE AMONG THE WEALTHIER CLASSES. BY ERASMUS WILSON, F.R.S.

AS the fidelity of statistics increases in proportion with the number of figures to be analyzed, we have enlarged our sphere of inquiry, on the present occasion, to five thousand cases, and we lay before our readers the results of our investigation. In the 5,000 examples of cutaneous disorder here assembled together, the different forms of disease amount to seventy-eight, which we have arranged in our *first* Table, in alphabetical order, with the individual numbers which each disease represents. In a *second* Table we have shown the relative frequency of the different forms; while, in a *third*, we have exhibited the numbers entering into the composition of the twenty-one groups of our CLINICAL CLASSIFICATION.

TABLE I.—*Showing the relative Number of Different Forms of Cutaneous Disease, in 5,000 Cases, arranged alphabetically.*

Akne	245	Elephantiasis	6
Akrochordon... ..	3	Erysipelas	6
Alopekia	310	Erythema	110
Alphos	314		
Anæsthesia	1	Folliculitis	18
Anthrax	2	Furunculus	50
Area	130		
Asteatodes	1	Gutta rosacea	435
Atrophia	2		
		Herpes	56
Chalazion	1	Hordeolum	4
Cheloides	14	Hyperæsthesia	2
Clavus	1	Hyperidrosis... ..	9
Comedones	2		
		Ichthyodes	29
Ekthyma	16	Impetigo	58
Eczema... ..	1677		

Table I. continued.

Kakotrophia	15	Poliothrix	22
Karkinoma	25	Porphyra	7
Kerion	28	Prurigo	36
		Pruritus... ..	30
Leukasmos	14		
Lichen	177	Roseola	5
Lupus	77	Rubeola... ..	4
Maculæ atrophicæ	1	Scabies	184
Melasma	27	Skleroderma	2
Molluscum fibro-areolare ...	1	Spargosis	1
„ sebaceum	5	Stearrhœa	4
Morphœa	5	Strophulus	4
Myrmekiasmos	19	Strumoderma	21
		Sykosis	64
Nævus cutaneus	10	Syphiloderma	162
„ vasculosus	22		
Neuralgia cutis	2	Teleiangeiektasia	13
		Trichoklasis	3
Osmidrosis	1	Trichorrhœa barbæ	1
		Trichosis	12
Pemphigus	8	Tumores encystici	8
Pernio	6		
Phakia	4	Ulcus (varicosus)	4
Phalakrotos	27	Unguium morbi	5
Phtheiriasis	7	Urticaria	36
Phytosis annulata	38		
„ favosa	2	Varicella	2
„ tonsurans	107		
„ versicolor	57	Xanthelasma... ..	3
Pityriasis	176	Xanthochroia	4

Table 2 brings to our mind the great preponderance of *ekzema* among cutaneous complaints, its number exceeding one-third of the whole, or upwards of $33\frac{1}{2}$ per cent. Then follows *madesis*, or loss of hair, which stands for more than 9 per cent.; *gutta rosacea*, nearly 9 per cent.; *lepra alphas*, more than 6 per cent.; *alopekia*, more than 6 per cent.; and *akne*, nearly 5 per cent. Scabies calls for a special remark: that disease rarely exists singly, every case represents several members of a family, and when two or more have presented themselves for our examination we have registered a single case only, to register all would be impossible. But we assume that the registered number, 184, may possibly represent one-fourth of the whole, which would bring the total up to 736, or nearly 15 per cent. Upon this showing, scabies should stand

next to ekzema, and may be taken to be half as frequent as the latter disease, a pretty fair estimate. In stating the relative frequency of diseases of the skin, therefore, we must place ekzema first, next scabies, and then may follow the remainder, in accordance with the table.

Next in frequency to akne, there follow:—Lichen, pityriasis, and syphiloderma, each more than 3 per cent.; phytosis tonsurans et annulata, and area, somewhat under 3 per cent.; and erythema and phytosis tonsurans, above 2 per cent. Lupus falls very little short of 2 per cent.; and pruritus et prurigo, sykosis, impetigo, phytosis versicolor, herpes, and furunculosis are above 1 per cent. Among diseases which occur in the proportion of one-half to 1 per cent., we are struck by discovering ichthyodes, melasma, phalakrotes, and especially epithelioma; the latter disease appearing in one out of every two hundred cases.

Between one-half and a quarter per cent. we find nævus vasculosus, strumoderma, cheloides, and leukasmos; the two latter affections occurring once each in three hundred cases. Pemphigus appears once in 625 cases; elephantiasis græcorum, once in 834; molluscum sebaceum and morphœa, once in 1,000. Amongst the more rare diseases are trichoklasis seu fragilitas crinium, skleroderma, atrophia cutis, phytosis favosa or favus, maculæ atrophicæ, molluscum fibro-areolare seu simplex, spargosis, and xanthelasma.

It may be objected, with some reason, that certain of the diseases comprehended in the table before us belong to general medicine and surgery rather than to special cutaneous medicine, and that others are either so chronic in their nature, or of so trivial a character, as seldom to make a demand upon the resources of the special practitioner. Among the examples of the first kind are, porphyra, erysipelas, roseola, rubeola, and varicella; among the second may be placed furunculosis, tumores encystici, and ulcera; and among the last, pernio, phakia, comedones, and clavus. Of these diseases, it may be said that they are not properly represented, in our tables, as to relative frequency; nevertheless, while it would be incorrect to omit them entirely, their number is really very small, scarcely more than a hundred, and they, therefore, cannot be said to invalidate the general result.

TABLE II.—*Showing the relative Frequency of the Different Forms of Cutaneous Disease, in 5,000 Cases.*

	Per cent.		Per cent.
Ekzema	1677 = 33·54	Nævus cutaneus ...	10 = 0·20
Madesis	468 = 9·36	Hyperidrosis	9
Gutta rosacea... ..	435 = 8·70	Pemphigus	8
Alphos	314 = 6·28	Tumores encystici...	8
Alopekia	310 = 6·20	Phtheiriasis	7
Akne	245 = 4·90	Porphyra	7
Scabies	184 = 3·68	Erysipelas	6
Lichen	181 = 3·62	Pernio	6
Pityriasis	176 = 3·52	Elephantiasis	6
Syphiloderma... ..	162 = 3·24	Molluscum sebaceum	5
Phytosis tonsurans et annulata	145 = 2·90	Morphœa	5
Area	130 = 2·60	Roseola	5
Erythema	110 = 2·20	Unguium morbi ...	5
Phytosis tonsurans...	107 = 2·14	Stearrhœa	4
Lupus	77 = 1·54	Strophulus	4
Prurigo et pruritus	66 = 1·32	Hordeolum	4
Sykosis	64 = 1·28	Xanthochroia... ..	4
Impetigo	58 = 1·16	Phakia	4
Phytosis versicolor...	57 = 1·14	Rubeola	4
Herpes	56 = 1·12	Ulcus varicosus ...	4
Furunculus	50 = 1·10	Akrochordon	3
Phytosis annulata ...	38 = 0·76	Trichoklasis	3
Urticaria... ..	36 = 0·72	Xanthelasma	3
Prurigo	36 = 0·72	Skleroderma	2
Pruritus	30 = 0·60	Anthrax	2
Ichthyodes	29 = 0·58	Atrophia cutis ...	2
Kerion	28 = 0·56	Neuralgia cutis ...	2
Melasma... ..	27 = 0·54	Hyperæsthesia ...	2
Phalakrotos	27 = 0·54	Phytosis favosa ...	2
Karkinoma	25 = 0·50	Comedones	2
Poliothrix	22 = 0·44	Varicella... ..	2
Nævus vasculosus...	22 = 0·44	Anæsthesia	1
Strumoderma... ..	21 = 0·42	Asteatodes	1
Myrmekiasmos	19 = 0·38	Maculæ atrophicæ...	1
Folliculitis	18 = 0·36	Molluscum fibro- }	1
Ekthyma	16 = 0·32	areolare ... }	1
Kacotrophia	15 = 0·30	Spargosis	1
Cheloides	14 = 0·28	Osmidrosis	1
Leukasmos	14 = 0·28	Trichorrhœa barbæ	1
Teleiangeiektasia ...	13 = 0·26	Chalazion	1
Trichosis... ..	12 = 0·24	Clavus	1

It was in marshalling one thousand cases of these diseases, and disposing them in groups corresponding with their natural attributes, that our attention was first drawn to the construction of a classification arising out of the diseases themselves,

and, therefore, a *Clinical Classification*; and our third table is devoted to the grouping of our 5,000 cases according to that arrangement. The ekzematous group includes more than one-half of the whole number of cases; the erythematous, the pemphigoid, the furuncular, the nervous, the vascular, and the hæmatopathic group, taken all together, fall short of a seventh part of the ekzemata. The developmental and nutritive affections, together with the hypertrophic and the atrophic affections, being all derangements of nutrition, we have included together under the head of *allotrophic* affections, presenting the three sub-groups, kakotrophic, hypertrophic, and atrophic. The alphous affections, founded on the lepra-alphos of the Greeks—the lepra vulgaris and alphoides of Willan—form another important group, the largest, with one exception, after the ekzemata. Two small, but noteworthy groups, strumous affections and karkinomatous affections, follow next, and are succeeded by three groups of blood diseases—namely, the zymotic exanthematous fevers; the syphilodermata and the leprous affections. The zymotic group, for reasons already referred to, is necessarily small, as is the leprous group, from the fact of leprosy being a foreign disease, although a disease of the British colonies. But the number of the syphilodermata is considerable, amounting to upwards of three per cent. of the whole. The next two groups, chromatopathic affections and phytodermic affections, are devoted to diseases of the rete mucosum, and are comparatively numerous. Then follows a very limited group, the onychopathic affections; and this is succeeded by affections of the hair system, and the glandular apparatus of the skin, the sebiparous and the sudoriparous glands; and the latter by a group of traumatic affections, among which, for the want of a more conformable place, we have located ulcers. The groups of nosophyta, steatopathic, and trichopathic affections are very considerable, the last immediately succeeding the ekzemata in numerical frequency.

TABLE III.—*Showing the Different Forms of Cutaneous Disease, occurring in 5,000 Cases, arranged in Groups, according to the CLINICAL CLASSIFICATION.*

I.—EKZEMATOUS AFFECTIONS 2711		II.—ERYTHEMATOUS AFFECTIONS 163	
Ekzema.....	1677	Erythema.....	116
Pityriasis	176	Erysipelas.....	6
Lichen and Strophulus	181	Urticaria	36
Impetigo	58	Roseola.....	5
Gutta rosacea	435		
Scabies.....	184		

TABLE III. *continued.*

III. — PEMPHIGOID AFFECTIONS 64		X.—STRUMOUS AFFECTIONS... 98	
Herpes	56	Lupus	77
Pemphigus	8	Strumoderma	21
IV.—FURUNCULAR AFFECTIONS 72		XI.—KARKINOMATOUS AFFECTIONS..... 25	
Ekthyma	16	Epithelioma cutis.....	25
Furunculus	50	XII.—ZYMOTIC AFFECTIONS 6	
Hordeolum	4	Rubeola	4
Anthrax	2	Varicella	2
V.—NERVOUS AFFECTIONS ... 71		XIII.—SYPHILITIC AFFECTIONS 162	
Hyperæsthesia	2	Syphiloderma	162
Anæsthesia	1	XIV.—LEPROUS AFFECTIONS 11	
Pruritus	30	Elephantiasis	6
Prurigo	36	Morphœa	5
Neuralgia cutis.....	2	XV.—CHROMATOPATHIC AFFECTIONS..... 52	
VI.—VASCULAR AFFECTIONS 35		Melasma	27
Teleiangeiektasia ...	13	Leukasmos	14
Nævus vasculosus ...	22	Xanthochroia	4
VII.—HÆMATOPATHIC AFFECTIONS 7		Phakia	4
Porphyra	7	Xanthelasma	3
VIII.—ALLOTROPHIC AFFECTIONS 98		XVI.—PHYTODERMIC AFFECTIONS..... 204	
<i>a. Kakotrophic—</i>		Phytosis annulata	38
Kakotrophia cutis	15	„ favosa	2
Ichthyodes	29	„ tonsurans	107
<i>b. Hypertrophic—</i>		„ versicolor	57
Myrmekia	19	XVII.—ONYCHOPATHIC AFFECTIONS..... 5	
Akrochordon.....	3	XVIII.—TRICHOPATHIC AFFECTIONS..... 597	
Nævus cutaneus	10	Madesis	468
Molluscum fibro-areolare.....	1	Trichosis	12
Spargosis	1	Poliothrix	22
Cheloides	14	Trichoklasis	3
Skleroderma	2	Kerion	28
Clavus	1	Sykosis	64
<i>c. Atrophic—</i>			
Maculæ atrophicæ	1		
Atrophia cutis ...	2		
IX.—ALPHOUS AFFECTIONS... 314			
Alphos	314		

TABLE III. *continued.*

XIX.—STEATOPATHIC AFFEC-		XX.—IDROTOPATHIC AFFEC-	
TIONS.....		TIONS	
	284		10
Folliculitis	18	Hyperidrosis.....	9
Stearrhœa.....	4	Osmidrosis	1
Asteatodes	1		
Comedones	2	XXI. — TRAUMATIC AFFEC-	
Malakosis.....	5	TIONS	11
Tumores encystici ...	9	Phtheiriasis	7
Akne.....	245	Ulcus	4

Our review of the numerical value of these diseases would, however, be incomplete, without an arrangement which could show the relative importance of the twenty-one groups of the CLINICAL CLASSIFICATION; such an arrangement we subjoin in the following table:—

TABLE IV.—*Showing the Different Forms of Cutaneous Disease, in 5,000 Cases, arranged in the Order of Frequency, in Groups, according to the CLINICAL CLASSIFICATION.*

Ekzematous affections	2711	Pemphigoid affections	64
Trichopathic affections... ..	597	Chromatopathic affections ...	52
Alphous affections	314	Vascular affections	35
Steatopathic affections... ..	284	Karkinomatous affections ...	25
Phytodermic affections... ..	204	Leprous affections... ..	11
Erythematous affections ...	163	Traumatic affections	11
Syphilitic affections	162	Idrotopathic affections... ..	10
Strumous affections	98	Hæmatopathic affections ...	7
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REVIEWS.

British Pharmacopœia : Published under the direction of the General Council of Medical Education and Registration of the United Kingdom ; pursuant to the Medical Act, 1858. 1867.

AS the *British Pharmacopœia* has now become the standard catalogue of our remedies, of their composition and of their strength, and as the General Medical Council profess to have provided for the wants of the entire body of medical practitioners throughout the United Kingdom, in the present *Pharmacopœia*, it behoves us, in the interests of Dermopathology, to inquire how far this profession is substantiated by the enlistment of remedies which, in an especial manner, belong to that department of the medical art. We turn our attention in the first place to the pages devoted to arsenic ; then to those which treat of the preparations of sulphur and its substitutes ; next to preparations of tar ; and, lastly, to such general remedies and general considerations as may be needful to complete our review.

The preparations of arsenic are five in number ; two being compounds of arsenious acid, and three of arsenic acid ; the two former are :—

Liquor arsenicalis,
,, arsenici hydrochloricus ;

and the latter :—

Ferri arsenias,
Sodæ arsenias,
,, arseniatis liquor.

While we find omitted without explanation :—

Arsenici iodidum,
Quinæ arsenis,
Liquor ammoniæ arsenitis,
Liquor arsenici iodidi, iodureti, of Neligan,
Liquor hydriodatis hydrargyri et arsenici, of Donovan,
and the arsenical caustics.

It would have been a great boon to the profession to have got rid of the compound tincture of lavender in the composition of the liquor arsenicalis (Fowler's solution), but that, unhappily, is retained. The lavender communicates a disagreeable flavour to the palate; and when the medicine is taken, as it generally is or should be, with the meals, and has to be continued for several weeks, and often months together, the nauseous perfume becomes an insuperable objection to its use. We not unfrequently find it necessary to prescribe an arsenical solution without lavender, and such a solution is kept by several of the chemists who are in the habit of compounding our prescriptions. The theory of the use of the lavender is that it gives colour to the solution, and so evades the danger of being confounded with water: this objection might have been got over by the use of saffron or cochineal, both utterly tasteless and equally well adapted for the purpose. But the theory of colour must be given to the winds as utterly untenable; when we find the acid solution of arsenic and that of the arseniate of soda both perfectly colourless. It is clear that colour is not regarded by the General Medical Council as necessary for protecting the use of the arsenical solutions; and therefore, that the offensive ingredient might have been, and should have been, omitted in the liquor arsenicalis as well as in the rest.

The Council have very judiciously brought up the liquor arsenici hydrochloricus to the same standard of strength as the liquor arsenicalis; each solution contains four grains of arsenious acid in the ounce, and the dose is marked at \mathfrak{mij} . ad \mathfrak{mvij} . But why this rule has not been followed out in the instance of the liquor sodæ arseniatis (Pearson's solution), is difficult to comprehend, the arseniate of soda is naturally weaker than the pure arsenious acid; and the dose of the solution is consequently \mathfrak{mv} . ad \mathfrak{mx} . instead of two and eight as of the former solutions. It may be said that the manufacturer has been guarded, by the strength of the solution, in all the cases, being four grains to the ounce; but it appears to us that the preferential consideration should have been given to the prescriber, to whom the compounding of the preparations is unfamiliar, but who requires to distribute the drugs faithfully in the public service. As the three solutions at present stand, two are strong and one is weak, and the danger is always imminent of the dose of the weaker being mistaken for the stronger. We are told, moreover, that the old acid solution of arsenic, the liquor arsenici chloridi, the solutio solventis mineralis of de Valangin, is scarcely more than one-third the strength of the acid solution, so that the Act of Parliament

may be fairly expected to poison a few of her Majesty's subjects, if it have its full swing. An old prescription for the liquor arsenici chloridi is brought to a druggist who is not familiar with the changes that have recently been made; he immediately goes to his freshly labelled liquor arsenici hydrochloricus, and, behold! the thing is done; the patient is made to swallow three times as much arsenic as the prescriber intended.

With ourselves, the liquor hydriodatis hydrargyri et arsenici of Donovan is not a favourite remedy, neither is the liquor ammoniæ arsenitis, nor the iodide of arsenic, nor the arsenite of quinine; and, certainly, we should discourage in every way in our power the use of arsenical caustics. But there are some who use and value these preparations, and the liquor arsenici iodidi, iodureti, of Neligan, is one of considerable mark; but these remedies must now be discontinued by order of the General Medical Council; or if they be used at all, it must be surreptitiously. We trust that in a future edition the Council may think it worth while to include one or all of these preparations; and, if not in the body of the work, at least as a rider, in an appendix.

The sulphur preparations of the British Pharmacopœia are:—

Sulphur præcipitatum,
 „ sublimatum,
 Sulphuris iodidum,
 „ unguentum,
 „ confectio,
 Potassa sulphurata.

But we miss in this selection two of our most valuable remedies, namely:

Sulphur hypochloridum,
 Solutio sulphuris cum calce.

And, lightly as the General Council of Medical Education and Registration may think of sulphur, if one of their body will glance over the "formulary of selected remedies," appended to our well-known volume "On Diseases of the Skin," say the *sixth* edition, he will find upwards of a quarter of a hundred of formulæ into which sulphur enters as the prominent ingredient; and several of these formulæ are the valued remedies of some of the most renowned men in Europe. There is the famous remedy of Vleminkx, of Belgium, which effects a cure of scabies in two hours; and there are the admirable formulæ of Hebra, of Helmerich, of Hardy, of Alibert, of Jadelot, of Bourguignon, and others. As the unguentum sulphuris is

very probably admitted into the British Pharmacopœia with a view to the treatment of scabies, we may mention that it is unnecessarily strong for the purpose, and that its efficiency is very considerably diminished by the omission from the formula of the carbonate of potash. The unguentum sulphuris iodidum is one of our best remedies for sykosis, but for that use requires to be reduced in strength by the addition of two parts of adeps benzoatus to one of the standard ointment, namely, to the proportion of ten grains to the ounce.

But what shall we say of the omission of the sulphur hypochloridum and the solutio sulphuris cum calce, the liquor calcii pentesulphidi? Why, to use the gentlest phrase, it is a blunder. A Council of Medical Education ought to have known that there is such a branch of medical knowledge as Dermatology, and it might have summoned a representative of that branch of knowledge to its bar, we forbear to do ourselves the justice of saying, to its counsel. It might have been aware that we have a literature by which we make known our progress and our experience; and it might have been assured that we are not made of stuff to be content to joggle on in the dubious ways of the pharmacologists of a past age. Let the General Medical Council lend its gracious ear, and we will tell it that if it wishes to cure akne, it must, with all speed, give a place to the formula for the unguentum sulphuris hypochloridum compositum in its pages. We quote the composition of the remedy from the "formulary of selected remedies" already mentioned, for its use; and we add to the formula of a valuable ointment that other valuable remedy which is as brilliant in its powers of preservation of the vine from the destructive oidium as the epidermis of man from the parasitic acarus; namely, the solutio sulphuris cum calce:—

UNGUENTUM SULPHURIS HYPOCHLORIDI, COMPOSITUM.

℞ Sulphuris hypochloridi	℥ij.
Potassæ carbonatis	gr. x.
Adipis benzoati	℥j.
Olei amygdalæ essentialis	℥ij.
Misce bene, ut fiat unguentum.	

SOLUTIO SULPHURIS CUM CALCE.

Liquor calcii pentesulphidi.

℞ Calcis vivi	℥j.
Sulphuris sublimati	℥v.
Aquæ fontanæ	℥xx.

Boil for half an hour, and filter; making the quantity of fluid product ten ounces. *

But we will tell the General Council of Medical Education something more, for it is clear that the therapeutical element is very wanting among them: sulphur is too irritating to the skin for general use, and to infants, from their natural delicacy of integument, is wholly unsuitable. The vulgar specific for itch is almost entirely abandoned in polite circles, and holds its small kingdom now among the "casuals;" it has given way to the more elegant and agreeable "*unguentum staphisagriæ*" of Bourguignon, for which we look in vain through the pages of the British Pharmacopœia, and we again have recourse to our "formulary," where we find the following:—

UNGUENTUM STAPHISAGRIÆ.

Bourguignon's formula.

℞ Staphisagriæ seminum recentium	℥iij.
Adipis præparati	℥v.

Digest in a sand-bath for twenty-four hours, at a temperature of 212°, and strain through a fine sieve.

And here we seek the help of the British Pharmacopœia, for if our prescription for *unguentum staphisagriæ* fall into the hands of a compounder who has not managed to keep step with the marching ranks of progress, he will be sure to serve up the *pulvis staphisagriæ*, simply rubbed into a mass with lard, a frightful, odious-looking composition, calculated to disgust rather than to cure, and wholly unusable; the remedy, in fact, worse than the disease; and he will excuse himself by the plea that there is no formula for *unguentum staphisagriæ* in the British Pharmacopœia. Perhaps the General Council may find an equally good excuse for excluding from their Pharmacopœia these, and such as these, valuable remedies.

Turn we to *tar*, and we find an equal poverty of resources; *pix liquida* and *unguentum picis liquidæ*, and all is told. While in the "formulary of selected remedies," above spoken of, we have:—*Tinctura picis*; *tinctura picis cum sapone*; *tinctura picis juniperi cum sapone*; *unguentum picis cum sulphure*; and a juniper tar soap. We have them and we know their value, and we should have thought that the reputation of their virtues might by this time have reached the ear of the *magnates* of the Medical Council. But what know we of the outer world, of the learned throes, the subtle workings of this inner *imperium in imperio*? We neither know nor do we care, but we do know that neither we nor the public whom we serve, shall

be deprived of valuable remedial agents through the *laches* of a too learned and too unlearned a conclave.

Thirteen years ago, namely, in 1854, we introduced into use and to the profession, the benzoated zinc ointment; it has done good service and has gained friends, and has won itself a place in the British Pharmacopœia of 1867. But not without opposition, and not without serious danger of total wreck, from the ignorance and jealousy of those to whom it was confided for preparation, has it made its way. By one pharmacist, benzoic acid was substituted for gum benjamin; another pretended to have made his first acquaintance with it through an American formula, although it was first made, and always best made, in the very street in which he lived and wrote, the deservedly celebrated house of JOHN BELL & Co. We say we introduced the benzoated zinc ointment and taught the public its use, and better far they know it, at the present time, than many of the profession which it was intended to serve; but we did not say that the idea of the gum benzoin originated with us. We had tried benzoic acid more than a quarter of a century back, and had failed; and the credit of the trial of the gum benzoin belongs solely to our lamented friend, ALEXANDER URE. One afternoon, lounging at Bell's, the suggestion was made; the next day the ointment transferred to us had commenced its pilgrimage around the world. Did it ever occur to any of our readers that Raphael and Titian, in their grandest works, had only yellow and blue and red for their agents, and that it was the use of these agents that made the master? So, equally, the benzoated zinc ointment may be a humble remedy, but see what glorious results it will accomplish in proper hands; it is not the remedy alone, reader, but its use. It is not the man, the flesh and bone, and nerve, and vessel; but the way he comports himself that makes the difference between *homo* and *vir*.

We feel that we have said enough in vindication of this important branch of medicine, our remedies. We have heard the word *speciality* slip off the tongue of those who should have known better, in a slighting sense. We do not appeal because we know our strength; we simply say in friendly counsel, beware. The speciality is beginning to entertain a sincere sorrow for the narrow views the "limited" generality upon which the general, as opposed to the special, presumes. When the general is without flaw or spot, the special will be found to be its brightest ornament. The British Pharmacopœia, lauding it with the highest praise that can be bestowed, is a useful but very defective production; and its chief merit consists in being the joint inspiration of the English,

the Irish, and the Scot ; for once, and after a huge struggle, these opposing elements have agreed to agree. The public will doubtless see in this agreement the dawn of a common good.

Leprosy. By C. MACNAMARA, Surgeon to the Calcutta Ophthalmic Hospital. Pp. 59. Reprinted from the *Indian Medical Gazette*. 1866.

ONE single emphatic word is the title of a commentary on a subject of great importance to the human family—namely, *leprosy* ; this commentary is embodied in an analysis, by Mr. Macnamara, of “ A Medical Report upon the Character and Progress of Leprosy in the East Indies, being Answers to Interrogatories drawn up by the Royal College of Physicians, London ;” the latter is published by the Indian Government, and contains “ no less than 107 reports from medical officers located between Peshawur and Calcutta, and the Himalayas and Central India, together with Burmah and the Straits.”

Leprosy is now universally recognised as a substantive disease, having two very striking characters—namely, the development of tubercles on the surface of the skin, and a state of insensibility or anæsthesia, hence the terms *elephantiasis tuberculosa* and *elephantiasis anæsthetica*. The morbid processes of elephantiasis have a special election for the nervous system, therefore anæsthesia is always present with the tubercular manifestation of the disease ; while elephantiasis anæsthetica is generally accompanied with atrophy and ulceration, and all appearance of tubercles may be absent. Nevertheless, the differences between the two forms are not differences of kind, but simply of manifestation, a *plus* or *minus* of a leading symptom ; and no more distinctive appellation can be assigned to them than that of variety. The tubercular variety is more common than the anæsthetic variety, but in general the symptoms are so intimately blended that the disease may be said to possess a mixed character. The leprosy, or elephantiasis Græcorum, is unquestionably a specific disease, and has no dependence whatever on syphilis or any other morbid affection.

Leprosy is slow and progressive in its manifestation, and suggests the expression “latent;” it has been long in the system before its first symptoms are exhibited, and after those early symptoms of a slight and trivial character have

appeared, the disease is tardy in its further progress. We have before us the notes of cases in which the disease made no sign of its presence until the patient had been two years absent from its endemic source. The early symptoms of the affection are often so slight, as compared with the fully developed disease, that some of the reporters have hesitated to speak of those symptoms as representing the disease, and have employed the terms "premonitory" and "leprous taint," but a fair consideration of the subject will we believe show, that the proper expression should be *the early stages of the disease*. Dr. Sutherland, of Patna, delineates this early stage very accurately:—"A rough, harsh, and scurfy condition of the skin, chiefly of the hands and feet; it is rigid, wrinkled, dry, and harsh, and a hard-pointed substance drawn over it will leave a white line like a pencil drawn over a slate; the heels are horny, cracked, and the soles of the feet are thickened and fissured, but in a less degree; the toe nails are uneven, much thickened, or almost wanting, their ends being thin, uneven, and ragged; persons affected to the above extent may remain in that state for years, the diseased condition not extending; but if subjected to privations, such as bad food, or food in insufficient quantity, defective clothing, impure air, laborious and exhausting occupation, while the person is badly nourished, leprosy of the anæsthetic form will frequently be the result."

Mr. Macnamara observes that leprosy usually commences "when the patient is about twenty years of age;" the truth is that it may occur at any period of life, but when it makes its attack in youth we have usually noted it at an earlier age; in two cases that have fallen under our notice, the age of inception of the disease was seven years; in five others the age ranged between eleven and fifteen; and we have likewise seen a case in which the disease made its first appearance at the age of sixty-seven.

The second question:—"Is leprosy common among the natives of the East Indies? Is it on the increase or not?" elicits the answer that it is common to a serious extent, and that the probabilities are in favour of its continued increase. With the exception of Burmah, every part of the Bengal Presidency is infested with the disease. Dr. Sutherland, after personal examination of the natives of Patna, for Government purposes, concludes that the "leprous taint," or as we consider it, incipient leprosy, is present "in one out of every ten of the adult rural population;" and out of 368 prisoners confined in the Patna jail, nineteen were afflicted with leprosy.

The question whether any exemption from the disease exists in favour of races or classes, is answered by the remark, that

“a few favoured races appear to be exempt from the disease, but with these exceptions all classes of natives, high and low, rich and poor, are subject to its inroads; probably each class suffers in direct proportion to its numerical strength.” The Mussulman and the Hindoo are numerically equally affected. Chittagong is inhabited by a Portuguese colony, who have preserved their isolation by intermarriage, and amongst these people leprosy is rare; while in general it is rarely met with among Europeans. In the Chinese, however, it is very common; and, in reference to sex, is considerably more frequent amongst men than amongst women.

Leprosy is undoubtedly hereditary; in this fact eighty per cent. of the reporters concur; and upon this point we conceive that there can be no difference of opinion. The history of the Chittagong colony supports the belief, as also does that of the French colony of New Brunswick. Mr. Macnamara further concludes “that the disease is at the present day mainly propagated by an hereditary taint from father to child.” This hereditary property of the disease is a barrier to the intermarriage of lepers; but, as we know, a belief prevails in China that in three generations the hereditary tendency becomes exhausted, and their intermarriage ceases to be interdicted.

A more important, and at the same time a more difficult question relates to the presumed contagiousness of leprosy; of eighty-six of the reporters who reply to this question, the majority, thirty-six in number, are in favour of contagion, twenty-four are opposed to the belief, while twenty-six remain neutral. “The arguments against the contagiousness of leprosy do not refute those in favour of it,—consequently, I can arrive at no other conclusion than that leprosy is contagious; but it is necessary for the propagation of the disease by this means, that the discharge from a leprous sore should enter the blood of the healthy person.” We believe, from the nature of the facts that have come under our own notice, that in whatever way it may be brought about, a *limited contagion* must unhesitatingly be admitted.

Let us say a few words on this topic; instances of Europeans who have resided in India for some years, and of children of European parents born in India, and afflicted with leprosy, are far from being rare. Are such cases sporadic; or are they the result of contagion? Does the disease originate in some condition of the atmosphere and of the soil; or is it the effect of association with persons similarly diseased? The question is a very difficult one to answer, and whichever way it be answered, the ultimatum is far from satisfactory. Does the mere residence in India promote the development of the

disease ; or is some contact with the disease necessary for its production ? It must be one or other of the two, as a fair consideration of the cases will serve to testify. Or, possibly—and we would give our adhesion to such a view of the case—both causes concur. It is not contagion alone which is the cause ; but contagion fortified by the circumstances of the climate.

One of the cases to which we refer was that of a Physician-General, who was attacked by the disease at the age of sixty-seven, after a forty years' residence in India ; another was that of a Captain in the Indian army, who was seized with leprosy after being ten years in India ; the third case was that of a military officer who served during the mutiny ; and a fourth that of a gentleman in the civil service who had resided in India for upwards of twenty years, and who manifested the first appearance of the disease at the age of fifty-eight. Well, it may be said, with regard to all these cases, that the cause was contagion from a diseased person. And yet we must remember with what horror and disgust the leper is regarded in India ; so that if there were contact, it must certainly have been unknown to the victim. The disease may have existed in the infecting person in an incipient stage—the “leprous taint” of Dr. Sutherland ; but, on the other hand, it is universally believed that at that early stage, at least, it is not communicable ; Mr. Macnamara deems it necessary “that the discharge from a leprous sore should enter the blood of the healthy person.”

Let us pass on to another series of cases. A European lady, born in India, was married to a European officer ; she underwent vaccination at the age of twenty-seven, the lymph being taken from a native child : shortly afterwards leprosy made its appearance on her cheek. A boy, the son of European parents, nursed by his mother, but under the care of a native nurse, who, to quiet him, *may* occasionally have given him her breast, was sent to England for his education at the age of eleven. He was then quite well, but two years after was seized with leprosy. Another boy and his elder brother were attacked with elephantiasis ; two other children escaped. The parents, Europeans, had both been married before and had families. The two first families were healthy, only the last suffered ; and in the partial manner that belongs to heredity ; or the cause may have been infected lactation. In one of the two boys the disease began at the age of seven ; in the other, at the age of thirteen. Another and a similar case is now under our treatment ; a boy, the son of European parents, but born in Malacca, the hotbed of leprosy, was sent to Ireland for his education. Within twelve months he became the sub-

ject of this terrible disease, his brothers and sisters remaining entirely free.

Surely these cases point either to contagion or to a climatic source ; we should prefer to think the latter, but in the face of the evidence we are unable to do so. But we have still another case that we must mention. A young medical officer, born of European parents, had connexion, in a drunken fit, with a leprous woman ; he then had a venereal sore ; was largely treated with mercury, and subsequently put under treatment for a supposed secondary syphilis, which turned out to be anæsthetic leprosy.* Can we doubt the conclusion that in this, as well as in the preceding cases, there is strong evidence in favour of the theory of the communication of the disease by contagion ?

It is by no means unlikely that the union of climate and contagion together, where heredity is not concerned, may be necessary for the propagation of the disease. In the instance of contagion without the favouring climate, the disease in course of time might die out ; so in heredity without the climate a similar result might take place. Thus the leprosy which invaded England at the return of the Crusaders might have been maintained for a while by contagion and heredity, but failing in the necessary conditions of climate at last gradually ceased ; possibly, in the first instance, losing its contagious influence, and subsequently its hereditary power. For similar reasons, possibly, the leprosy of New Brunswick continues to be hereditary, but has long since ceased to be contagious ; and a corresponding argument might apply to the leprosy of Norway, the *spedalskhed*. Whereas, if we wish to study all the true proportions of the disease, namely, climatic development, heredity, and true contagion, we must seek them at their source, in the east or in the west.

The theory of the contagion of leprosy receives very strong support, and in fact derives an appearance of certainty, from the interesting narrative of the progress of the disease in Honolulu, the metropolis of the Sandwich Islands, appended to Mr. Macnamara's paper by Dr. Hillebrand. The latter observes :—

In the Sandwich Islands, where I have been living ever since 1851, practising the profession of medicine, and to a great extent among the natives of the country, leprosy was unknown before 1859, and after close scrutiny cannot be traced further back than the year 1852, or at the most

* These cases are reported in full in the appendix to the "Report on Leprosy, by the Royal College of Physicians." 1867.

1848. A recent census, taken by the Government, established the number of lepers to be about 230, out of a population of 67,000 natives, or nearly $3\frac{1}{2}$ in one thousand. As I have good reason, however, to believe that only cases with a marked tubercular development have been reported, the simply anæsthetic form not being generally recognized as being of leprous character, this estimate falls rather short of, than exceeds, the reality, which may safely be estimated at four in every 1,000. The character of the disease was first recognized in August, 1859, shortly after the establishment of the Queen's Hospital and Dispensary. It then occurred to me that I had met with similar cases occasionally but rarely before, the first of which I could recollect as far back as 1853. Further inquiry among the natives at large brought to light that a few had been observed in 1852 and 1851; and an old chief, well versed in the history of his country and in everything pertaining to his countrymen, referred the first case known to him to the year 1848. In 1859, when I first brought the existence of lepra amongst our people to the notice of Government and the public, only a few cases became known, but with every subsequent year the leprous patients presenting themselves at the public dispensary increased in number, until during 1864 and 1865 it was considered of quite ordinary occurrence that lepers should apply for relief. It is worthy of notice that, soon after the character of the disease became known, natives began to call it "mai pake," the Chinese disease. Whether this name was derived from a belief that the disease had been imported through Chinamen, of whom there have been a considerable number settled at the island for years, or if it simply owed its origin to the circumstance that they learned from the Chinaman that the disease was common in China, I have not been able to ascertain.

There is good reason for the belief that leprosy was introduced into these islands by foreign sailors, probably Chinese, among whom the disease is so common and so virulent. The rapidity of its spread is extraordinary. There has been no time for the development of heredity, and those parts of the islands which are most remote from communication have as yet escaped the contagious influence. The Polynesians are well fed, well clothed, cleanly, well provided in every way, and enjoy one of the finest climates in the world, ranging in temperature between 60° and 88° , constantly fanned by the trade winds, and entirely free from malaria. The disease is not limited to the poor, but has extended to the better class; and, in general, when the patients are interrogated as to the source of the disease, they refer it to contact with persons similarly affected.

As to the mode of diffusion over the group, I have been able to gather a few important facts. The first leper seen by me in 1853 lived then on a thinly populated district of the island of Oahu, about twenty miles from Honolulu, in a small village near the sea. When, in 1861, I made inquiries about this man, I learnt from the most trustworthy source that he

was now in a far advanced stage of the disease ; and that in his immediate neighbourhood, six other persons had been taken with it. The same thing was observed in the district of Northkona Hawaii, where towards the end of 1864, about seven cases became known, six of which were reported to have contracted the disease in the village of Kaslua, the tax-collector of which place had, for several years, been the only leper in the district.

In the fitful struggles that have from time to time, and by different writers, been made to fix the cause of origin of leprosy ; all the various influences of hygiene, of diet, and climate, have been brought under accusation individually and collectively, and all have been ultimately rejected. We have ceased, *almost*, to speculate on the probable source of the poison of small-pox, of rubeola, and scarlatina ; and we are beginning to show our wisdom in ceasing to speculate on the cause of leprosy. We know nothing of the cause, and very probably may never do so ; we do not suggest abstinence from a continued search, from a careful collection and estimation of facts, but we strongly repudiate the self-satisfied conclusion that the truth has yet been discovered. We know very much concerning the disease in its hereditary and, possibly, contagious character, but we know nothing whatever with regard to it in its sporadic origin. Mr. Macnamara shows us how little the influences of climate are to be trusted, when we perceive the disease flourishing under extremes of temperature and of geographical position ; thus he observes :—

It cannot be admitted that climatic influences have power in themselves to generate or stop the progress of leprosy, because it is well known that at present leprosy prevails in parts of Norway and Hindustan, in the Arctic Circle and China, Iceland and New Zealand, the Cape, Morocco, Mexico, the Sandwich Islands, Borneo, Batavia, throughout Asia Minor, parts of Russia, and Carthagina. This list might be enlarged, but it includes such a variety of climates, that it would appear impossible the nature of any particular place can influence the disease ; this remark applies not only to temperature, but to elevation above the sea, for we find leprosy spreading among the inhabitants of the table-land of Mexico, as well as among the hill tribes living on the slopes of the Himalaya. By reference also to the circumstances of this affection among the natives of India, the prevailing idea may be refuted that leprosy spreads principally among those who live on the sea-shore ; for it is very common in races living hundreds of miles from the sea, as in Behar, the North-West, and the Punjab. As leprosy, therefore, exists at the present day among human beings in every part of the globe, at all elevations above the level of the sea, both inland and on the sea-board, it cannot be admitted that any peculiar climatic influences are inimical to its spread, and still less that they are in themselves capable of generating the disease.

In a similar manner Mr. Macnamara disposes of the questions of general sanitary influences and diet; as, indeed, they have been already disposed of by other writers.* These questions apply solely to sporadic origin; for the highest in rank and the most cleanly in person, and we may almost say the most healthy in constitution, may imbibe the disease from an hereditary or from a contagious source. It is necessary to keep these two considerations apart as much as possible; and having admitted hereditary and contagious influence, devote our thoughts more particularly to the really difficult question, namely, that of sporadic source.

It follows as the natural consequence of this method of viewing the disease that Mr. Macnamara and Dr. Hillebrand should be strong advocates of *segregation*,† and should urge upon the Indian Government, as also upon the Polynesian Government, the necessity of establishing hospitals and villages for the separation of the leper from the rest of society, as in fact a necessary step for the “stamping out” of the disease. We shudder at the reply to the fifth question:—

Has any provision been made for the cure of leprous patients, either by the Government or by private charity, in the Bengal Presidency? The answer to this question is simply—No; nothing has as yet been done, and hundreds of these poor outcasts are wandering about over the country, many of them in a state of fearful destitution and want; in fact, the picture drawn of their condition in these reports is probably hardly exaggerated, and yet it is affirmed that in some instances lepers are eaten alive by jackalls and other wild animals. As the disease advances, the patient's hands and feet rot away, and ultimately he becomes incapable of defending himself against the attacks of vermin; the worse he grows the more loathsome is the disease, and the less will his countrymen assist him, till at last, from exhaustion and fatigue, he lies down in a ditch or open field, and his fate, it is to be feared, is often the fearful one above mentioned. When we consider that in this presidency there are about a hundred million people, and that in some places one in sixteen of the population is affected with the taint of leprosy, we may imagine the extent of misery which this terrible disease must inflict.

* An admirable paper, in illustration of the hopelessness of seeking the cause of leprosy in “races, geographical situation, and diet,” was communicated to the Medico-Chirurgical Society in April, 1864, by Dr. Andrew Davidson, Medical Missionary and Physician to the Court of Madagascar.

† Dr. Andrew Davidson observes—“It certainly deserves notice that, while the laws of Madagascar excluded leprous persons from society, the disease was kept within bounds, but after this salutary law was permitted to fall into disuse, leprosy has spread to an almost incredible extent.”

The Antipodes of the “outer barbarians” seem better able to deal with the question than ourselves :—

Our Chinese neighbours set us a good example in this respect, for Dr. Hobson tells us that for the town of Canton alone, the native Government maintain an hospital capable of containing one thousand lepers. And, again, Dr. Hillebrand says of the Sandwich Islands :—“Leprosy has invaded almost every district of our island group, alarms the people, and seriously occupies the attention of the Government and Legislature, who during the season of 1865 voted the comparatively large sum of 30,000 dollars for the establishment of a secluded hospital and leper village, in an isolated locality, on one of the smaller islands.” In answer, however, to the question before us, it may be affirmed that, with the exception of a resting-place (four walls with a roof over them cannot be called an hospital) for some two hundred lepers at the outside, there is no special provision for lepers in this presidency. I may remark that they cannot, as a general rule, be taken into our hospitals, for most of the native patients would leave at once if a leper were admitted.

On the subject of the *treatment* of leprosy we look in vain for any new lights, and how can it be otherwise when the opportunity is neglected of gathering the sufferers together, with a view to their succour, and a scientific investigation and study of the disease? Mr. Macnamara talks of a “judicious administration of arsenic, combined with the extract of neam (?); the chaoul-moogra oil; the powdered root of the mudar; but unless “the poorer classes have proper establishments provided for them, as well as medicines, it is impossible to expect that they can obtain permanent relief; there is no specific for leprosy, and each case will consequently require special treatment.” Dr. Hillebrand observes that he only found aggravation of symptoms follow the use of mercury; a purgative course of cream of tartar and jalap was useful in one recent case; arsenic had generally some good effect; but the best of all remedies was the nitrate of silver :—

Argenti nitras is a powerful tonic, and exercises an unmistakable influence on the nervous reflex-action, as in epilepsy. In one of the worst cases of leprosy, a systematic administration of this remedy produced a complete arrest of the disease, which lasted more than one year; in many others amelioration followed its use. I commence by giving one-tenth of a grain three times daily, and gradually increase, until a quarter and even half a grain are reached, which occurs about the end of the third month. If after four or six weeks’ continued administration, no manifest improvement takes place, I generally abandon its use. From copious draughts of cold water, six to eight tumblerfuls daily, I have also seen some good effects.

We may summarize Mr. Macnamara's conclusions briefly as follows:—1. The distinguishing characters of leprosy are those usually recognised, presenting the two prominent forms, tubercular and anæsthetic. The disease is specific, and wholly independent of syphilis. 2. It prevails extensively among the natives of the East Indies, and is probably on the increase. 3. It is not confined to any particular class of the native population, and none are exempt from its influence. 4. It is hereditary; and, under certain circumstances, contagious. 5. Next to nothing has been done for the cure or treatment of leprosy patients in the East Indies. 6. The disease, when it has once obtained a hold upon the constitution, is incurable. 7. Segregation is a known and effectual means of curtailing the spread of leprosy.

The Pathology and Treatment of the Contagious Furunculoid.
By THOMAS LAYCOCK, M.D., F.R.S.E., Professor of the
Practice of Medicine and of Clinical Medicine in the
University of Edinburgh. Pp. 23. 1856.

PROFESSOR LAYCOCK, in a clinical lecture delivered to his class in York, in February, 1851, announced the existence and prevalence of a furuncular affection presenting peculiar and remarkable characters, epidemic in its nature and susceptible of communication from one person to another by contagion. His further experience and observation, both in York and in Edinburgh, and up to the date of his pamphlet, convinced him still more of the truth of his views. In some doubt as to the proper designation of the affection, he at first named it "a new epidemic exanthem," seeing "that the furuncular inflammation was by no means the necessary or even most common form of the disease," and concluded that the term "contagious furunculoid" might be accepted "as being as little objectionable as any." The disease might be distinguished as a contagious dermatopathia pseudo-furuncularis; and, in reference to its more obvious features, as a vesico-pustulo-phlegmono-furuncular eruption. The dermatologist will most likely recognize the disease at once by these last-named characters, and he will call to mind instances of a lowered and probably kachectic condition of health, in which he has had brought before him this multiple eruption of the lowest possible type. Such is the pseudo-furuncular eruption before us; sometimes it occurs as a crop of small furunculi of the ordinary character; sometimes it begins as a

vesicle, which runs on to the bulk of a bulla; the bullæ are scattered sparsely on the skin, are filled with a sero-purulent and sometimes sanguineous fluid, expose an excoriated base when they are broken, and are subsequently covered with a crust formed of desiccated morbid secretion. Sometimes the inflamed and hardened base and pustular summit betoken an ekthyma; sometimes the furunculus increases in extent and depth, and assumes the anthrakoid character, or becomes a true anthrax; sometimes the sub-cutaneous cellular tissue becomes involved, and a phlegmon is produced; sometimes the inflammation is erysipelatous; or there may be phagedæna or even gangrene, when the lip, the eye, the tongue, the vagina, or the scrotum are the organs attacked. On the edge of the eyelid the disease would be hordeolum, at the extremity of the finger onychia or whitlow. Sometimes several of these forms may be mingled together, sometimes they may be more or less separate; while their more common seat of distribution is the back of the trunk, the buttocks, and the thighs; although the eruption may be thrown out wherever an irritant is applied, such as a blister or poultice, or whenever the integument of the body has been lowered in tone and vitality by a foregone eruption or exanthem. It sometimes follows small-pox, scarlatina, measles, or cholera; and we have seen it in association with ekzema and scabies. Our readers will distinguish in the features which we have just delineated a genuine eruption of low condition, an inmate of the workhouse, or the prison, or the hospital, or, may be, of the convalescent chamber. In such a case, kachexia and kakotrophia are present, and purpura is not far distant; while we have before us a miserable association of evils; the asthenic vesicle; the puriform vesicle; the puriform or ichorous bleb; the hard-based pustule; the furuncle; the anthrax; the phlegmon; and then that terrible offspring of asthenic, of devitalizing inflammation, gangrene, and phagedæna.

Such is a picture of the state of cutaneous disease, an eruption consisting of multiple forms, which the author, with good reason, hesitates to call furunculus, and therefore names "furunculoid;" and yet it is not *like* furunculus, as that term would imply; but a dermatopathia multiformis, of which furunculus is one only of the manifestations, but which in its variety of lesions betokens a grave constitutional debility, a lowered vitality of the integument, and, doubtless, of the general system. Dr. Laycock calls our attention to the association of this affection, the furuncular epidemic, with epidemics of variola, of scarlatina, of rubeola, and of cholera, and its general increase with diseases manifesting an asthenic

constitution of the population. Of the truth of this observation and of its prevalence in an epidemic form there can be no question.

The recent furuncular epidemic appears to have been generally prevalent throughout the world—certainly in the European and American continents, throughout the United Kingdom, and in all the British colonies. In England and the United States its appearance has been coincident with various epidemics. Typhus, influenza, cholera, small-pox, scarlatina, measles, whooping-cough, and croup, were epidemic in London, in successive years, coincidently with a largely increased mortality from phlegmon and carbuncle. In the years of the maximum mortality, namely 1853 and 1854, the prevailing epidemics were cholera, scarlatina, measles, whooping-cough, and croup.

The disease furnishes evidence of its kachectic character, not only by its association with other epidemical diseases, which are themselves due to a lowered tone of vitality among the population, but also in the forms which its lesions assume; forms which in the whole field of dermato-pathology are the most distinctive of debility: we may therefore regard as proved beyond question the kachectic nature of the disease and its epidemic prevalence, and may turn our attention to other points of much importance and interest which Professor Laycock's essay raises for our consideration; namely, the cause of the disease and the possibility of its transmission by contagion. The cause of the disease he considers to be a "specific and communicable *materies morbi*, the operation of which, upon the living tissues, is to devitalize them;" in some instances this *materies morbi* is probably of epizootic origin, in others possibly a modification of the variolous, the scarlatinous, or the rubeolous poison; and he strongly favours the opinion that this *materies morbi* may be communicated from one individual to another, and from one part of the body to another, and so be the means of conveying the disease by contagion. It is this important fact that he brings prominently before us in the title of his pamphlet, namely, "contagious furunculoid."

There are few things more difficult of proof than contagion; and few things more unsatisfactory and inconclusive than experiments by inoculation with a *materies morbi* of uncertain contagious or of sub-contagious properties. We inoculate; a crop of furunculus appears, but we have inoculated at an epidemic season, and our inoculation has probably been nothing more than an exciting cause. Let us take a more practical example; a healthy child is vaccinated, and a general eruption of ekzema immediately appears; the parents attribute the eruption to a *materies morbi* introduced into the system with the vaccine lymph; but the medical man knows that the

ekzema is the consequence of the depression of system produced by the vaccine fever, and that the vaccination is simply the exciting cause, the vaccine lymph being perfectly pure and perfectly innocent. Contagion must, therefore, in many instances be a mere matter of opinion, of judgment, to be determined by the weight of evidence. Let us, then, examine the evidence which Dr. Laycock sets before us. A Dane, who had been for nine months a resident in Leith, was admitted into the Royal Infirmary, Edinburgh, suffering under the furuncular epidemic in its pemphigoid, purulent, pustular, and furuncular form; the disease spread through the clinical wards and infested them during June, July, and August. On inquiry it was ascertained that several of the patients in the ward had used the water in which the Dane had bathed.

A gentlewoman being confined unexpectedly, had to "borrow" a monthly nurse. In about a week after the latter arrived, the patient had a boil on the forehead; to this succeeded another on the cheek, over the malar bone; and to that a third on the upper lip. Upon inquiry, it was found that the nurse had been in attendance, for the two months previously, upon an infant which had numerous boils, and that in the same house with the infant (a boys' boarding-school) many of the inmates were similarly affected. In this instance, the nurse had had to feed her puerperal patient only, and to wash her face and hands, so that one might almost conclude that the *materies morbi* had dropped upon her from the nurse.

It is certain, however, that immediate contact of the skin with the morbid fluids of a person dying with the disease will induce it. A very decisive proof of this is to be found in a recent number of the *Lancet*. A patient in the Devon County Asylum died Nov. 19th, with a large anthrax on his back. Mr. Kirkman (assistant medical officer) made a *post mortem* examination fifty-six hours after death. The morning following (Nov. 23) he felt heat and smarting on the back of both hands, and on the right eight or nine angry-looking furuncles were observed; on the left two. Afterwards, fresh ones were developed concurrently with abscesses in the palm, until December 21, when from fifteen to twenty boils appeared on the wrist (subsequently to the application of a poultice) with pain up the arm and shoulder. These appeared in two distinct forms; some, like the first crop, beginning "red, hot, and painful, with a small white ring around each internal to the inflamed base; others by little vesicles, at first unaccompanied by any active inflammation, but itching most intolerably, and containing a translucent glairy fluid. On the right hand, they all end in the same manner, viz., by the formation of a little purulent core which does not escape, but, on being removed, leaves a very deep small hole;" these, if allowed to scab over, get a second core. On the left hand, the boils had no core, but burrowed deeply and discharged an offensive sanious pus. After the parts were healed, the hand would bleed profusely from the most trifling prick or abrasion. It would appear from this, that extent of application of the *materies morbi*

increases its development, for the right hand, being the hand most extensively exposed, had the larger number of furuncles.

Dr. W. B. Richardson had a case which in some degree supports the idea that the *materies morbi* may be communicated to the *fœtus in utero*. A child, born of a mother with boils, had a suppurating tumour on the breast at birth ; it suffered also from a succession of boils.

The proofs that the *materies morbi* spreads from one portion of the skin to another portion, consist—1. In the actual extension of the affection from a parent boil as from a centre, so constantly observed in cases in which there is a continued succession of them. 2. In the fact that appliances, which facilitate the application of the morbid fluids to the surrounding portions of the surface (such as poultices, as in Stewart's and Mr. Kirkman's cases, above mentioned), conduce to the extension of the disease ; and, 3. In the fact that a method of treatment well adapted to prevent such application of the morbid fluids to the sound skin equally prevents the spread of the disease.

These illustrations are calculated to make an impression on the mind of reflecting men, and induce them to observe narrowly the phenomena presented by this disease whenever it may come before them. The proofs of the spread of the *materies morbi* from one part to another are not very satisfactory ; the presence of the disease presupposes a furuncular diathesis ; the poultice is a depressant, the locally exhausted vitality becomes a proximate cause of the cutaneous lesion. This we believe to be the explanation of the mother boil and its little ones, and in some degree of the extension of an anthrax under the influence of the same remedy. But the supporters of the germinal matter *contagium* would pursue a still different mode of reasoning ;* it was not, they would say, the contact of particles of the crusts from the Dane with the body of the other patients which created the contagion, but the diffusion of minute particles of those crusts through the atmosphere, let us say, in shaking the bedclothes ; these particles, in their essence a *materies morbi*, would be inhaled by the other patients, would be drawn into the air-cells of the lungs, and so conveyed into the circulating current, and create a diathesis in their new abiding-place, identical with that of the body from which they had escaped. But whichever of the theories of contagion be adopted, the fact of a *materies morbi* remains the same ; and such *materies morbi* is susceptible of being conveyed from one individual to another, and in a constitution of depressed power of lighting up a disease similar to that of which it is itself the representative.

Professor Laycock's researches into the origin of the *materies morbi* introduce us to several important and interesting matters. By the aid of tables furnished him by Dr. William

* JOURNAL OF CUTANEOUS MEDICINE, vol. i., p. 341.

Farr, he points out the great increase of deaths from carbuncle and phlegmon subsequent to a certain date, and he proves that this date corresponds with the first introduction of foreign cattle and dead meat into this country. He has already identified carbuncle and phlegmon with the "contagious furunculoid;" and he goes on to show that the *contagium* of this disease is, in some instances at least, of epizootic origin.

The facts detailed are interesting in their relations to the present subject, for, although no connection can be actually traced between the epizootic carbuncle of the Continent and the epidemic carbuncular furuncle of late years, they are certainly sufficient to establish such hypothetical analogies as may constitute a clue to further researches. 1. We clearly establish the probability *à priori* that the latter is a contagious disease; and this probability approaches certainty when connected with the facts and observations I have detailed as to the mode of spread of the affection. 2. If we compare the laws of spread and general pathology of variola and vaccine with the laws of spread and general pathology of the epizootic carbuncle and epidemic furunculoid, we can comprehend the probability, at least, that the latter, as to some of its forms, may after all be only a modification of the former; and, 3. Consequently that we must extend our inquiries into the comparative pathology of the epizootic carbuncle, if we would acquire a satisfactory knowledge of the epidemic form.

Of the epizootic carbuncle, a pestilential epizootic prevailing on the Continent of Europe, and presenting some analogies with the furuncular epidemic, he observes:—

It is known under various names, as gangrenous splenitis or *milzbrand*, from the fact that a predominant pathological change is a pultaceous or gangrenous-like inflammation of the spleen; or as *febris carbunculosa*, contagious carbuncle, anthrax, etc., from the special cutaneous inflammation which characterizes it, although the inflammation is not always carbuncular. It is a disease which attacks the herbivora and omnivora amongst the quadrupeds, and birds and fishes as well as man. It spreads with great rapidity, and, like all similar diseases, is seen under various forms and in various degrees of intensity. There are two principal forms, namely, as it occurs with or without the carbuncular or cutaneous inflammation.

The eruptive form of the disease is either erysipelatous or carbuncular. The former variety is known also as *milzbrand rose*, *ignis sacer*, and *pseudo-erysipelas carbunculorum*. The inflammation appears first as red spots, which become confluent, and then swollen and hard. The swelling is œdematous, vesicles or phlyctenæ form, and gangrenous softening of the subjacent tissues takes place. Sometimes the death of the tissue is accompanied by an evolution of gas, and an accumulation of it beneath the hide; this constitutes the *emphysema carbunculorum*.

There can be no question whatever that this epizootic pest is a highly contagious disease, nor that the *materies morbi* has, in the more intense

forms, a singular energy in devitalizing the blood and living tissues. The saliva, the discharges from mucous membranes, the serum, and the blood itself, all communicate the *materies morbi* of the disease. The peritoneal serum, and the gangrenous fluids from the carbuncles or phlegmons, are in especial highly contagious. Greve states that dogs which lap the serum poured from the ruptured abdomen of cattle dead of the disease will die on the spot. A few drops of the warm fluid, dropped into the eye of a pigeon, killed it in three hours. A horse was accidentally sprinkled with some on the chest, and although the fluid was washed off immediately, by the following day an enormous carbuncle was formed, and the life of the animal endangered. All things smeared with the flesh, blood, or fluids of diseased animals, as clothes, instruments, the hands of persons, etc., constitute *fomites*; it is even believed to be communicable through the atmosphere. Horses and black cattle suffer the most fatal attacks, but it is communicable from them to man, from man to man, and from man to dogs and rabbits. (Hoffmann's and Grense's Experiments.)

The carbuncular fever in man is somewhat similar in its phenomena to an intense form of gastric typhus, or to the true plague; if the carbuncles are not freely developed, death may take place in twenty-four hours, or not until the lapse of two or three days. If they form freely, the case is more favourable.

The carbuncle may, however, be wholly local and apyretic. In this case it is not dissimilar in its character from some of the worst forms of the current epidemic furunculoid. First, a spot like a flea-bite appears, with a black point in the centre; this itches or is painful, swells, becomes red, and has the appearance of a raised papula, over which there is formed a small bleb or vesicle containing a yellowish or bluish-red fluid. In twenty-four to thirty-six hours the carbuncle is formed, the centre of which dries and turns black, and round it a circle of vesicles. If the disease is severe, the inflammation extends, and the centre becomes gangrenous and sloughs. If it be a mild form, the morbid process is circumscribed, as in ordinary carbuncle. Sometimes extensive erysipelatous inflammation, ending in gangrene, is the chief characteristic of the local disease. In this way great destruction of an eye and eyelids may take place; or the lip may be entirely destroyed, if that be attacked, etc. Besides these parts, the neck, tongue (glossanthrax of Pliny), and the arm and hand, are particularly the seats of the inflammation in man.

The modes in which the *materies morbi* is communicated to man are various. Besides those mentioned, it has also appeared, after flaying an over-driven animal, or after inserting the arm into the throat of sickly cows or oxen, into the rectum of cattle with dysentery, into the vagina of parturient cows, etc.

I have already referred to the observations by Mr. Ludlow, Mr. Stanley, and Mr. Lloyd, in 1852, of a carbuncular inflammation of the upper lip, altogether similar to this communicated epizootic form. I am not aware, however, that any case of this kind, occurring in Great Britain, has been attributed to the *materies morbi* of the epizootic carbuncle. When we consider, however, the active commerce of the United Kingdom, in hair and hides, with those countries which are the seat of the disease, it does not seem

improbable that the *materies morbi* has been imported. And this surmise acquires the more probability from the facts mentioned as to this point, by French writers. M. Trousseau states that, in two factories at Paris, where hair from Buenos Ayres is used, twenty persons have died, in about ten years from carbuncle, although only six or eight were employed daily. Rayer saw several cases of the disease while attached to the Hôpital St. Antoine, all of which came from the same factory, and where hair from Russia was worked up. It is more than probable, therefore, that at least some of the worst cases of carbuncle which have occurred in the United Kingdom have been really due to direct contagion from imported fomites, although we may not be justified in attributing all to this source.

One of the most remarkable instances of the epidemic is recorded in Holy Writ as being one of the plagues of Egypt. There has been a good deal of discussion by classically learned commentators as to the nature of this plague. To the medical reader it appears to be analogous to the carbuncular fever I have just briefly described. It followed upon a very fatal epizootic, which attacked horned cattle, sheep, horses, asses, and camels, indiscriminately—as is the case with the carbuncular pest; and it was characterized in man by furuncular inflammation and *phlyctides*, as the word (translated blains in the English version) stands in the Septuagint. This furuncular epidemic was not probably a transitory disease in Egypt, for in Deuteronomy xxviii. 27, it is one of the affections with which the Jews are threatened under the phrase, “botch of Egypt.” It is noticeable that the word there translated “botch” is the same as that (*shechin*) which in Exodus is translated “boil.”

If we proceed to summarize the phenomena of the furuncular epidemic we shall find:—1. That the disease presents a variety of pathological lesions—all of an asthenic type—of which the furuncle is only one; 2. That it makes its appearance in an epidemic form; 3. That it is associated with other epidemics and with an unhealthy constitution of the population; 4. That it is associated with epizootic disease; 5. That the *materies morbi*, or poison in which it originates, may be derived from an epidemic or from an epizootic source; and, 6. That the *materies morbi*, or poison, is communicable, and the disease, consequently, contagious. With these general views as to the nature of the morbid affection, we may follow our author onwards to the therapeutical conclusions to which he arrives. “One great fact,” he observes, “stands out distinctly; the severe forms of furunculoid are constantly associated with kachectic states. The treatment of the contagious furunculoid resolves itself into two divisions: 1. The treatment of the kachectic states with which it may happen to be associated; and, 2. The local treatment, including the prevention and spread of the disease.”

The second indication, namely, to prevent the spread of the disease, merits more careful examination. It may be fulfilled either by rendering the

furuncles abortive (if the disease be in that form), or by protecting the sound skin from the influence of the diseased portion. According to my experience, the application of the concentrated tincture of iodine over the incipient boil, rarely fails to abort it. How far the tincture may be useful in the erysipelatous forms, I have no experience. The reports of others are much in its favour. The tincture of the sesquichloride of iron and the nitrate of silver has been also used for the same purpose, with alleged beneficial results. The gangrenous form would be best treated by the application of strong nitric acid to the sloughing margin.

When the furuncle or carbuncle is well advanced in size, the tincture of iodine may still be used, but a slight puncture at the apex, so that it may be inserted, is advisable. The need for a crucial incision will depend much upon the extent to which sloughing has taken place—a free exit for this is undoubtedly requisite. If there be no large amount of sloughing, the incision may be altogether dispensed with. If suppuration and sloughing seem inevitable, the water dressing is the simplest and most comfortable application. Care should be taken, however, so to apply it that the lint used shall not slip about, and any slough or pus that may be formed should be carefully removed as soon as possible. In short, the most scrupulous cleanliness should be aimed at.

“Probably any method of dressing the boil which excludes the air, secures warmth and moisture, and prevents the morbid fluids extruding upon the sound skin will serve as well as the water-dressing.” Dr. Laycock has here touched the chord which vibrates the correct principle of treatment, but his means are inadequate to his will; the water-dressing is only one degree less injurious than the poultice or the common linseed poultice of which he very truly says, “No application is worse; for it usually is followed by a fresh crop of boils.” But let him anoint the surface thickly with the benzoated oxide of zinc ointment; next dust the moist places with the oxide of zinc powder, and cover the whole with a sheet of cotton wool, and he will then have a dressing of superlative quality for the different lesions, however multiple their form; a dressing that will prevent the contact of morbid humours with the sound integument; will alleviate, will soothe, and will promote the healing and restoration to its healthy tone, of the suffering skin. Neither water nor sponge should be allowed to approach the diseased surface; discharges are to be soaked up with a soft napkin, and the dressing may be repeated twice or once in the twenty-four hours, as may best conform to the comfort of the patient. Of course this dressing is not to interfere with the special treatment of the boils; which may be painted with the tincture of iodine, as recommended by Professor Laycock, or may be painted with

liquor plumbi; and, where a point of suppuration has been formed, may be touched with potassa fusa.

And now we must break the bond of a pleasant and instructive inter-communion with our learned brother and very old friend; and in taking leave of him, in offering him our thanks for his excellent essay, and in commending it very seriously to all who wish to keep their knowledge on a parallel with the present line of march of medical science, we will conclude with a quotation that embodies ample material for considerate and reflective thought.

The *prophylaxis* merits a few words. I have already indicated some of the sources of the *materies morbi*, but it is certain, I think, that these are not all. The local inflammation is of a kind induced by various septic poisons. Of these, that which appears to be generated during a severe and prolonged parturition, is one; probably the poison of puerperal fever is another, and of the Levant plague another. It remains to be determined whether the variolous poison may not, under certain circumstances, be the *materies morbi*; it may be equally a question whether the flesh of animals, dead of dysentery, typhus, pleuropneumonia, etc., may not, when used even as food, be a means of communicating the disease. As to all these points, there are analogies in the natural history and behaviour of epidemical and communicable fever-poisons, such as to warrant cautious and careful inquiry.

*On the Antiseptic Principle in the Practice of Surgery.** By JOSEPH LISTER, F.R.S., Professor of Surgery in the University of Glasgow.

PROFESSOR LISTER has taught us the conservative properties of carbolic acid, and has helped to remove some of the errors under which we have been for a long time slumbering. An injured part is a part lowered in its vitality; and, though it may not positively putrefy, a sub-vitality is created, and a tendency to decomposition is set up. Carbolic acid arrests decomposition, puts a stop to the smouldering of the vital flame that exhausts the vital lamp in pus-formation; seals as it were the issue of the vital stream through the wounded integument, and affords protection to the injured parts, and time to enable the tissues to recover their power. In this sense carbolic acid is a conservative agent, and the principle of treatment a conservative principle.

It is a well-understood fact that decomposition and recom-

* Read at the meeting of the British Medical Association in Dublin, August, 1867.

position are reciprocally allied; the tissues are disintegrated, but the germinal material remains; probably assumes a new form, and in its new form becomes the germ of the morbid process, to which it owes its dangerous properties, and by which it has been set free to do its work of deadly mischief; to be the bearer of a property for similar mischief to surrounding parts, to parts of the same body hitherto healthy, and to other bodies at a distance. Thus we find established a chain of mutually connected links, namely, depressed vitality, decomposition, recomposition in an inferior and septic form, and contagious propagation. But carbolic acid is the antidote of this destructive series: it stimulates the vitality of the injured part; it checks decomposition; thereby it puts a stop to the production of a septic principle, and consequently to contagion; and by its conservative influence on the vitality of the tissues, it prevents the operation of that lowered form of perverted vitality, which is the source of pus-formation. Thus, then, besides a conservative principle, we find an antiseptic principle at work, and we have the explanation of the title of Mr. Lister's paper "*On the Antiseptic Principle in the Practice of Surgery.*"

The healing of a bruised wound is retarded by decomposition and pus-formation; if decomposition and pus-formation, for it is impossible to separate them, could be prevented, all obstacle to the healing process would cease, and the most unpromising wounds or ulcers would close up with as much ease and rapidity as the most harmless incised wound; and more than that, and greater in importance, the absorption of purulent and septic matter into the system would be prevented, and the chief danger of a contused and lacerated wound like that of a compound fracture averted. All this, says Mr. Lister, is effected by the use of carbolic acid: saturate every part of the wound with this substance; dress it with the same, and cover the dressing in such a way as to maintain a perpetual atmosphere of the acid in the midst of and around the wound; and all the fair expectations that we have raised in the minds of our readers may be realised: decomposition will be prevented; no septic organisms will be produced and set free; pyogenesis will be suspended; and the wound, however severe, will heal without pain, without suffering, and without constitutional disturbance. Can it be so? Is it a tale of fairy land that is thus brought to our ear, or is it true? It is vouched for by Mr. Lister; and within the hour may be put to the test. Mr. Lister observes:—

I arrived several years ago at the conclusion that the essential cause of suppuration in wounds is decomposition, brought about by the influ-

ence of the atmosphere upon blood or serum retained within them, and in the case of contused wounds, upon portions of tissue destroyed by the violence of the injury. To prevent the occurrence of suppuration with all its attendant risks, was an object manifestly desirable ; but, till lately, apparently unattainable, since it seemed hopeless to attempt to exclude the oxygen, which was universally regarded as the agent by which putrefaction was effected. But when it had been shown by the researches of Pasteur that the septic property of the atmosphere depended, not on the oxygen, or any gaseous constituent, but on minute organisms suspended in it, which owed their energy to their vitality, it occurred to me that decomposition in the injured part might be avoided without excluding the air, by applying as a dressing some material capable of destroying the life of the floating particles.

Now, we are not quite prepared to agree with Mr. Lister that decomposition is a cause of suppuration ; although there can be no doubt that in a wound such as he describes both processes are present ; both, however, as effects of a lowered and perverted vitality. Then, we think, that he has not done wisely to reject the oxygen of the atmosphere as an agent of decomposition, for the sake of “minute organisms” that are marvellously theoretical. If he had wished to exclude the atmosphere from a wound he could have found no more effectual way of succeeding than by investing every attainable spot of the surface with carbolic acid. Oxygen may not be wholly excluded, but it is doubtless excluded to a very considerable extent. The practice of excluding the atmosphere from an ulcerated surface, and replacing it with carbonic acid gas, is no new principle of cure. On the ground of the exclusion of the atmosphere from an inflamed and excoriated surface, we have for years past defended the use of ointments in ekzema and other cutaneous eruptions. By excluding the atmosphere, we relieve the irritability and pruritus of the skin in all the exanthemata ; and the most brilliant cure of a compound fracture that we ever saw accomplished was one in which, after erysipelas had commenced and the subcutaneous cellular tissue crepitated to the touch, the integument was thickly anointed with lard to exclude the atmosphere and afterwards surrounded with cotton wool. The carbolic acid treatment carries our thoughts back to the surgery of the ancients, who poured boiling oil into their wounds to promote cure, and is a counter-blast to the odious poultice, and the over-much lauded and very questionable water-dressing.

We must not be supposed to doubt the existence of septic organisms or atoms of poisonous germinal matter ; nor to undervalue their dangerous power of carrying contagion from place to place : all that we wish to establish is that, *per se*, the

oxygenated atmosphere is an irritant, a promoter of decomposition, a cause of the development of septic germs, and that the principle of excluding the atmosphere forms an important part of the carbolic acid treatment; the treatment being, doubtless, very much heightened in value, by the fact of the agent of exclusion of the atmosphere being an antiseptic material. We therefore see in Mr. Lister's plan, not an antiseptic treatment alone, but also a contrivance for shutting out the oxygen; and in addition to both, a means of preserving the vital force. Vital conservation is not a property which has heretofore been looked for in our local remedies; but our experience convinces us that such an influence exists; carbolic acid would seem to be one of these remedies, and further trial may determine the fact. Whatever tends to arrest chemical or organic influence coming from without is a vital-conservator; whatever promotes exterior chemical or organic activity is the reverse; such are the whole tribe of poultices and water-dressings. The carbolic acid treatment is essentially a defensive treatment against external agencies of every kind; an impenetrable barrier between the forces within and their enemies without.

The instruments with which the grand objects already detailed are brought about are: 1. Pure carbolic acid, fluidified by the addition of a few drops of water; 2. Carbolic acid putty, composed of one part of carbolic acid to four of boiled linseed oil, mixed with chalk to the consistence of a pliant mass; 3. Carbolic acid dissolved in oil, a saturated solution; 4. A solution of one part of carbolic acid in twenty parts of water; and 5. An impermeable metallic covering, such as tin or tinfoil. The use of these appliances is very simple; the wound, whether simple or contused, is saturated with the carbolic acid; next, as a dressing, is spread a piece of rag soaked in the carbolic acid oil; over that, if the wound be of considerable size, is placed a layer of the putty a quarter of an inch thick, compressed by a roller between two layers of calico; and over the whole the impermeable plate of metal to prevent evaporation, the latter being kept in its place by adhesive plaster or by a bandage. The putty dressing should be changed daily as long as any discharge continues to flow, and the oiled rag is allowed to dry upon the wound and form a healing crust. Where the wound is of small extent the putty is not required, a daily saturation of the oiled rag with fresh carbolic acid being all that is required. Where discharges are taking place, the carbolic acid must be used with the greater assiduity; in fact, a perpetual state of carbolic acid vapour must be maintained, and the vapour must be made to pene-

trate as deeply into the tissues as possible. In a simple incised wound, and in wounds made for surgical purposes, the same caution is to be used; and the carbolic acid must be ready at hand, in the form of the watery solution (No. 4), to destroy "any septic germs that may fall upon the wound during the performance of an operation." While in opening an abscess, "a piece of rag dipped in the solution of carbolic acid in oil is used as an antiseptic curtain, under cover of which the abscess is evacuated by free incision. Then follows the antiseptic paste to guard against decomposition occurring in the stream of pus that flows out beneath it; the dressing being changed daily till the tissue has closed."

We believe that we need say no more to encourage our readers to give the antiseptic plan a trial; not merely in the cases cited, but also in ulcers and suppurative affections of the skin; and this, as far as possible, without reference to the dubious hypothesis of septic organisms or septic germs, at least in the case of ordinary pure air; from the atmosphere of a hospital, septic organisms are probably never absent. To Mr. Lister we offer our thanks for his very able exposition of a mode of treatment that will go far to alter the whole practice of surgery in the instance of wounds and suppurating surfaces; and we look forward with interest to his further researches. We must, however, be allowed to have a last word for after-thought in the shape of two quotations which here follow, namely:—

"All the local inflammatory mischief and general febrile disturbance which follow severe injuries are due to the irritating and poisoning influence of decomposing blood or sloughs." And, secondly: "Experience has shown that the compound which carbolic acid forms with the blood, and also any portions of tissue killed by its caustic action, including even parts of bone, are disposed of by absorption and organisation, provided they are afterwards kept from decomposing."

Clinical Conversations on Affections of the Skin. By DR. LAILLER, Physician of the Hospital St. Louis.

THE above title is a happy one; it is not so formal as "Lecture"; and more truthful, as it better represents the kind of intercourse which subsists between professor and pupil at these meetings, particularly in France. On the present occasion it is the heading of an introductory address delivered by Dr. Lailier to his class in St. Louis, and we propose to give a sketch of its subject.

He begins by deploring the vacancies which have taken place in the Medical Staff of the hospital during the few past years.

GIBERT resigned his appointment in 1863; was succeeded by himself; and at the close of 1866 was unhappily carried off by cholera, after an illness of a few days.

DEVERGIE has submitted to the necessity for retirement, but with a mind still active he continues to devote his thoughts to the interests of Saint Louis; and has lately proved his good-will to the institution by the initiation of a Museum of Diseases of the Skin.

CAZENAVE, also after long and brilliant services, has sought repose in retirement.*

Bazin and Hardy, together with Lailler, fill the vacant places. The latter, speaking for himself, abjures the theories which he finds to have taken possession of Saint Louis; and proposes to devote himself to facts founded on clinical observation.

For this time only he meets his class in the theatre to develop his plans, to-morrow and for the future the bedside will be the field of his instructions. It is needless to halt by the way to dwell on the definition of lesions; these may be learnt in the observation of the patient. With the intention of observing and comparing, a fixed classification would be useless; he has therefore no classification of his own to add to the forty-two classifications which a student of Strasburg once succeeded in bringing together in an inaugural thesis. If a classification were needful, he would select that of Bazin, the most comprehensive, the most medical; *only* that it admits without proof, assertions that are seemingly true, but that still need the stamp of scientific demonstration; he may accept the convictions of the author, as a matter of sentiment; but between sentiment and certainty there is an immeasurable chasm. Therefore he has no classification. He prefers to adopt the method followed by his learned colleague in his remarkable work "On the Generic Affections of the Skin"; which, combining with the genera of Willan, the specific descriptions of Alibert, constitutes, in his opinion, the most useful book and the best guide for study, of the present day.

But what is the type of these conversations? They will be to the study of disease of the skin, that which herborizations are to the study of botany. We shall endeavour to diagnose and to classify by the bedside of the patients, the affections which they present; just as we should examine and classify the plants which in herborizing we may have collected. But there our task will only begin; after having studied the affection before us in order to determine whether it be a *deformity* simply, or whether it be dependent on an existing *cause*, either external or internal, we must next consider the *prognosis* of the disease and that of the constitutional disturbance of which it

* Alas! to these honoured names we must now add the loss which the world has sustained in the death of Rayer.

may be the manifestation ; we must decide upon the indications for *treatment*, and we must seek to fulfil our therapeutical intention.

Nothing can be more embarrassing and at the same time more important than the diagnosis of cutaneous disease : look, for instance, at the diagnosis of scabies ; you are told that it is easy : that is a grave error. See how frequently the most experienced physicians of this hospital hesitate, and often arrive at a decision by a kind of intuition, the result of long experience, instead of the proper pathognomonic sign, the *acarus*, or at any rate its burrow. But upon a correct diagnosis must depend the appropriate treatment, so different from that of other eruptions.

Let us take another example. The frequent manipulation of arsenical preparations gives origin to an ulcer so closely resembling a syphilitic ulcer, that the special circumstances of the case can alone determine the differential diagnosis. But the importance of a correct diagnosis is shown in the fact that the arsenical ulcer requires for its cure nothing further than the removal of its cause ; whereas, the syphilitic ulcer will demand the energetic employment of remedies both external and internal. Lailler illustrates his proposition by the detail of a case in which he was completely mistaken in his diagnosis between these two forms of ulcer. On one of his early days at St. Louis he pointed out to his class a "magnificent indurated chancre," which occupied the lower lip of a patient ; the patient declared it to be impossible ; a swollen sub-maxillary lymphatic gland suggested indecision ; and then it was ascertained that the man was employed in preparing colours for the artificial florists ; and that all the day long his hands were in contact with arsenical greens.

We may divide cutaneous affections into two chief groups ; those of external and those of internal origin ; while we set aside deformities and congenital disorders or errors of development. With regard to the external group there is perfect agreement ; as to the latter, namely the internal affections, we have to inquire, 1. Whether they are definite morbid entities (*i. e.* independent disease of skin,—ED.) altered in character by the condition of the part ? or, 2. whether they are simply a manifestation by the skin of a morbid state of the system, be that morbid state constitutional (*i. e.* inherent,—ED.) or diathetic ? Those who adopt the first of these alternatives, disciples of the school of Willan, speak, for example, of *ekzema* in a scrofulous or in a rheumatismal constitution ; whereas, under like circumstances, others, perceiving more in the question than a mere modification of organ, would express themselves by the terms *ekzematous scrofulosis* (*scrofulide*), or *ekzematous arthrosis* (*arthritide*), or simply, scrofulous or arthritic *ekzema*.

It must be admitted that on the day that saw the unconditional recognition of the syphilodermata a grand step was made in the direction subsequently followed with so much perseverance and success by M. Bazin. Shall we remain behind and contest, foot by foot, the doctrines of Willan, or shall we, pursuing the track of our learned colleague, accept at once the *scrofulides*, the *arthritides*, and the *herpetides* ? You must not look to me for a discussion of the arguments, for or against the opinion that cutaneous eruptions are nothing more than a simple manifestation of constitutional or diathetic disease. The battle has been well fought ; and it is no longer in the chair,

but by the bedside, that, with the proofs before our eyes, the demonstration is to be sought.

And what is our present position : syphilis and the syphilodermata are unanimously recognized in their constitutional influence. Scrofula, as a morbid entity, is no longer rejected ; and if there be those who, disputing as to words, deny the individuality of scrofula, there are none who do not sanction the existence of the scrofulous. These differences of opinion point to a great difficulty ; we know well the origin of syphilis, but what is the source of scrofula ? A few crusts on the scalp, some cracks behind the ears, a sub-maxillary adenitis consequent on dentition ; some chilblains in winter ; further on in life a scabbiness of the nostrils, or a sprinkling of pustules of ekzema pustulosum ; are these to be regarded as scrofulides ? If so, how very few escape this morbid manifestation ; who shall say where health ends ; where disease makes its beginning.

A similar argument applies to arthritis and the arthritides. We are not as yet agreed whether the term arthritis should include both gout and rheumatism ; and it would be unreasonable to confound two diseases so different. Both, it is true, manifest their operation in the joints, but there their resemblance ceases ; the visceral symptoms differ materially ; in gout, disorder of the digestive and urinary apparatus ; in rheumatism, disturbance of the circulatory system. Even if we admit arthritis, we must be able to prove that certain eruptions belong to this constitutional affection ; that they have well-marked characters, a specific course, and yield to specific treatment.

Then as to herpetism or dartre, the same difficulties, even greater than those that belong to arthritis, stand in our way ; we have no visceral symptoms to corroborate our diagnosis ; only this, that, according to Bazin, in their ordinary method of manifestation the constitutional disorders have their beginning in the skin, that is, in the superficial tissues of the body : they have nothing to distinguish them but their objective characters, and these so similar as to be easily confounded. So that we find M. Pidoux recognizing in herpetism a blending of arthritism and scrofula ; while Hardy engulfs in his group of dartres the greater number of the arthritides of Bazin.

In the face of such diversity of opinion, reserve becomes a duty, and the more so, when we have occasion, and that not seldom, to see the same patient, submitted to the simultaneous examination of several of our most eminent physicians, pronounced to be the victim of a scrofulide by one ; of a dartre by another ; of an arthritide by a third ; and he may esteem himself a fortunate man if a fourth does not declare his malady to be a syphilide, or perchance a parasitic affection.

We now turn to cutaneous parasitism, a sort of bond between external and internal causes of disease. All the world is of the same opinion as to the etiological influence of the animal parasites, the epizoa, the only differences that can exist relating to their depth of operation on the economy, and the possibility or the danger of a too sudden cure,—a danger, in our opinion, of the most chimerical order.

Vegetable parasitism has not been accepted with the same unanimity ; nevertheless it is without question one of those great truths that owes much of its brilliancy to the labours of Bazin ; but the subject is as yet very far

from being exhausted ; a good deal still remains to be elucidated ; and if nothing else, at least, the supposed parasite of alopecia areata, the existence of which, although unprepared to deny, I have as yet been unable to confirm. I agree with Bazin in the belief, that just as the acarus is the cause of cutaneous eruption, so also are the vegetable parasites the cause of the diseases with which we find them associated. But the thing to be investigated is the influence of the soil on which these parasites have fallen, an influence so potent, that while in one place they fail in development, or maintain but an ephemeral existence ; in another, when once they have taken root, they resist for a great length of time the most active remedies that can be employed for their removal, and conquer the most unremitting patience of treatment.

Behold, then, how vast is the field of our investigation, and how greatly those persons deceive themselves who believe that in a few weeks they may learn to distinguish and to treat diseases of the skin : in a few weeks they have scarcely the time to discover their ignorance. For many years past, and notably during the last twenty years, these diseases have been the subject of methodical and attentive research ; the progress that has already been made is immense ; and yet how many problems are yet unsolved, problems that may serve to bewilder successive generations of men who may devote their attention to a study at once so difficult and so fascinating.

Our next step, after mastering the nature of the affection, will be to determine its *prognosis* ; of itself, if it be idiopathic ; of the disease of which it is the symptom, if we believe it to be symptomatic. Of an idiopathic disorder, originating in external cause, the prognosis will be favourable, unless there be present some source of aggravation. But we must not fail to remember that a cutaneous disease, however decidedly traumatic in its origin, may be the starting-point of a constitutional or of a diathetic affection, which has slumbered until now ; such cases are by no means rare. Scabies, for example, awakens so frequently a constitutional eruption, that our forefathers, unconscious of the existence of the acarus, were led to believe in a psoric virus.

If the disease before us be a syphiloderma, our prognosis must be directed to the phenomena of constitutional syphilis ; and our opinion might be influenced by the stage of the disease, our prognosis of secondary syphilis being probably more favourable as to time, than of tertiary syphilis. Seat also would come in for its share of notice : a lupus on the limbs is less serious than one upon the face, for the latter, in the course of years, might eat away the greater portion of the features. So, also, the constitution, the age, and other circumstances of the patient must be taken into consideration, and carefully weighed.

Again, in a person of scrofulous diathesis syphilis might be grave ; it is generally so with elderly people. Besides, an important element of prognosis is the kind of tact which experience alone can bestow. Nevertheless, we must be cautious in our prognosis of cutaneous affections : one, of a character apparently slight may defy the best resources of our art, while another of old standing, and seemingly rebellious, may yield in a few days or weeks to the most simple treatment.

If the diagnosis and prognosis of affections of the skin be difficult, much more so is treatment : patient and doctor need all their philosophy not to be discouraged. Are we powerless ? should we remain inactive in the presence of these rebellious disorders ? Certainly not ; we have the opportunity of seeing many of our patients who have enjoyed an interval of eight, ten, or twelve years of freedom from their disease ; and if the cure has failed of being radical, the respite has been worth the having ; while far from seldom we succeed in effecting a permanent cure.

For diseases of external cause, usually due to professional occupation, and excepting the parasitic affections, rest and cleanliness are generally sufficient for the cure. For symptomatic affections, we must give our attention to the lesion, and at the same time to the constitutional disorder of which the disease is the local manifestation. We therefore have—

1. A local treatment, comprising topical remedies of every kind.
2. A mixed treatment, operating at the same time on both the local disorder and general system : such are baths of every variety.
3. And lastly, a general treatment, consisting of derivatives, tonics, alteratives, and specifics. For example, mercurial preparations and iodide of potassium in syphilis ; iodine and sulphur for scrofula ; arsenic for herpetides or dartres ; and alkalies for arthritides. We may pass over the question of mercury and iodine in syphilis, of iodine in disorders of the lymphatic glandular system, and of sulphur in scrofula, and, according to some, in dartres. But with regard to arsenic in herpetism and the herpetides, and to alkalies in arthritis and the arthritides, the therapeutical indications are as yet wholly unsettled, and, as we fear, must remain so for a long period to come.

Our readers will agree with us that Dr. Lailier's introductory lecture is an admirable performance, the language, the opinions, and the views of a sensible man ; and that the course which he proposes to adopt, namely, to investigate disease at the very altar of its existence, the bedside, is the single one to which we must all look for the truth and for the perfection of our beautiful branch of medical science. We see in him a champion of fact as opposed to theory, and we feel sure that before his honest sincerity of inquiry and investigation, the mists of scrofulism, of arthritism, of herpetism, of parasitism, will meet with their deserts and be dispersed to the winds. One thing we must teach him, for he must be one of us, namely, the value and the uses of medicine. This is an English art ; and we must endeavour to weaken his too implicit confidence in baths ; doubtless in hospital practice of some use, and particularly in the splendid establishment of Saint Louis, but in home practice, and amongst us, of very secondary value, and often not only useless but noxious. If we were to propose a treatment by baths

to our patients, we should probably be met by the bluff remark, "I want to be cured, Doctor, not to be washed." Our Gallic colleagues, in the constant use of baths for the treatment of disease, to which they are trained from their earliest youth, are apt to overlook the importance of other therapeutical measures, and to leave more valuable remedies to undeserved neglect.

Second Annual Report of the Dispensary for Diseases of the Skin, Belfast. By HENRY SAMUEL PURDON, M.D. 1867.

DR. PURDON very opportunely contributes the statistics of his dispensary practice, as a comparison with the results, published in our last and present number, of the statistics of practice among the wealthier classes. Of his patients, Dr. Purdon observes:—

Fully one-third of the cases admitted were chronic, in each instance existing for upwards of six years. I may mention that 342 (out of 824) of the patients were mill-workers, who, it appears, are, from their occupation, liable to several cutaneous diseases.

Of 813 of the 824 cases, the relative proportions of the diseases were as follows:—Ekzema, 138; syphiloderma, 119; scabies, 111; strumoderma, 100. In a second series we find:—Ulcers, 70; impetigo capitis, 60; phtheiriasis, 46; and dermatitis, inclusive of erythema and pernio, 38. Then a sudden fall brings us to alphas, 16; akne, 14; furunculus, 12; phytosis annulata, 11; and lupus, 11. Still fewer in number are—anthrax, 8; onychia, 7; phytosis tonsurans, 6; pemphigus, 6; urticaria, 5; pruritus, 5; favus, 4; enkystis, 4; pityriasis, 3; herpes, 3; and phytosis versicolor, 2. And of the following only one single representative each:—area, sykosis, steorrhœa, molluscum sebaceum, hyperidrosis, purpura, nævus, myrmekia, cheloides, and epithelioma.

Comparing these figures with those of our tables (page 392), ekzema will be found to be nearly one-half less frequent. Syphiloderma is represented by 14 per cent. in lieu of 3 per cent.; scabies by 13 per cent. as against 15 per cent.; but here our remarks upon that disease must be taken into consideration, which would probably quadruple the per-centage; while strumoderma occurs in the immense proportion of 12 per cent. as against less than one-half per cent. Alphas is stated at 2 per cent., in lieu of 6 per cent. according to our tables; and lupus is somewhat more

frequent than among the wealthier classes. Several of the affections noted by Dr. Purdon are especially diseases of the lower classes; for example, strumoderma, phtheiriasis, and impetigo capitis. While we are struck by the infrequency of ringworm of the scalp, phytosis tonsurans, the comparative frequency of ringworm of the body, phytosis annulata; and also the number of cases of favus, namely, four in 800, whereas in our tables the number is only two in 5,000. Sykosis is also remarkable for its rarity, one in 800, in place of one and a quarter per cent.; and a similar remark may be made with regard to epithelioma.

We can quite understand that, with reference to some affections, the rarity may be only apparent, and not real; and that they do not appear in the dispensary tables on account of giving rise to no other inconvenience than one of deformity. This observation may apply to alphas, to mild cases of scabies, to area, and some others. In impetigo capitis we note a disease of children of the non-working classes, who can afford the time to seek relief at the dispensary for trivial affections; while onychia, Dr. Purdon informs us, is a disease to which mill-workers are peculiarly liable.

Dr. Purdon is working in the proper fashion, with rule and measure; selecting and adjusting his facts; a personification of the honest labourer, who may look a king or a philosopher in the face without abashment, and with all our heart we wish him God speed.

Foreign Dermatological Literature. Reviewed by J. L. MILTON, Surgeon to St. John's Hospital for Diseases of the Skin.

MEASLES.—In the journal of the Imperial and Royal Society of Physicians of Vienna, Dr. Karg mentions an epidemic of measles chiefly noticeable for the greater mildness than usual of the disease; a change which Dr. K. considers due to the improvement in the general health of the children, consequent upon giving them much more fresh air than they had previously. Prior to 1857 such attacks wore a character of weakness, but of late years the prevailing character has been decidedly inflammatory without a trace of asthenia. Should this observation be verified, it may suggest a doubt to those who will tell us, that the type both of disease and constitution has of late been changing from the sthenic to the asthenic.—*Zeitsch. der kaiserl. königlich. Gesellsch., &c.*

ACUTE PEMPHIGUS.—The *Berlin Klinische Wochenschrift* contains an account by Dr. Steffen of an outbreak of acute pemphigus at Stettin. There were in all eight cases, seven of which occurred in the Children's Hospital, the other in private practice. Six out of the eight patients died. With one exception they seem to have been poor, half-starved, rachitic little things, suffering under curvature of the spine, glandular swellings, catarrh of the intestines, &c. The disease appeared, excepting only one case, without preceding or accompanying fever; in no single instance was any previous pathological change seen in the epidermis, nor could the eruption be referred to a development of herpes iris, as Von Barensprung asserts is the case in the majority of instances. There was always more than one outbreak of the eruption; even in the most rapid cases there were fresh attacks. There was some stomatitis in two of the cases. Dr. Steffen is therefore quite opposed to Hebra's view, that there is no such thing as acute pemphigus, though both it and the chronic form may begin alike; fever may accompany both. He leans to the opinion that it is contagious, and that when it attacks children who have passed the age of puberty, its tendency is so fatal that a recovery is the exception. The course of the disease was very rapid, death occurring as early as the third day in two cases. The local treatment seems to have been limited to washing with lukewarm water and bathing with bran-tea; after the vesicles had burst, the tender surfaces were painted with oil of sweet almonds or glycerine. The internal treatment consisted of tincture of steel, hydrochloric acid and tonics, cod-liver oil and lime-water; digitalis and ipecacuanha were also given with sedatives. Good diet, wine, and milk seem also to have been freely used.—*Berlin Klinische Wochenschrift*.

ADDISON'S DISEASE.—Professor Oppolzer, in the Vienna weekly journal, gives several valuable lectures on bronzed skin. He says that Virchow was the first to show that this affection may accompany cancerous disease as well as tubercular degeneration. Vidal, finding so few cases of bronzing without alteration of the capsules, came to the conclusion that there is in this disease some specific affection of these bodies. Virchow, formerly opposed to Addison's view, seems now clearly of opinion that there is some connexion. Bamberger, however, calls attention to the fact that the disorder may be purely inflammatory. Brown-Sequard maintained that the removal of the supra-renal capsules was even more rapidly fatal than stoppage of the urinary secretion; but Philipeaux, Gratiolet, Virchow, and more than any other, Harley, showed that when a careful mode of extirpation was adopted, the

animals outlived the operation a long time. The capsules are liable to nearly all the forms of disease which assail glandular organs. The staining takes place on the under surface of the rete Malpighii, and in many places penetrates the superficial part of the cutis. It appears in the form of reddish-brown pigment-granules, partly scattered in an irregular manner, partly deposited in individual cells; even the brain and outer layer of the venous walls may become the seat of this change. The colour may be smoky, yellowish-brown, granite, or olive, but the latter only occupies patches of the skin. Niemeyer does not consider it analogous to the darkening of the skin in melanæmia, but allied to the discoloration of the nipple which takes place in pregnancy. Buhl found great loss of fibrine in the blood and increase of the white corpuscles. Oppolzer thinks there is considerable anæmia of the nervous centres, and that dyspepsia is a more common symptom than vomiting. The urine seems to have been normal in most cases; sometimes, however, it contained a little albumen. All the cases have proved fatal except one mentioned by Mr. Hutchinson, in which it was supposed that the disease of the capsules was inflammatory. He seems quite convinced that the disease is an entity, and gives the particulars of fifty-four cases in which disease of the capsules corresponded with very decided bronzing of the skin; but he calls to mind, as others have done, that disease of these organs has been found where there was no staining. Max Doederlein has alone related four instances of cancer of the capsules where the skin was free from discoloration. Ogle and Manneret have also each contributed a case. On the other hand, there is clear evidence of bronzed skin occurring without disease of these bodies, as shown by Peacock, Simpson, May, Hutchinson, and Greenhow.

In the *Deutsche Klinik* for 1866, Professor Seitz contributes six cases of the same affection. Of those, five proved fatal, treatment being quite powerless in four. One patient, however, a working man, seemed to be benefited by the employment of iodide of potassium and Heilbronn waters: he left the hospital relieved, and did not return. Another patient also derived some good from the use of the iodide, but the improvement was of short duration. In one case the colour was grey-brown; numerous grey tubercles were found in the liver. In one patient a melanotic tumour formed on the median line, about four inches below the navel; at the time of death it was six inches long, four broad, and three thick. There was a similar but much smaller tumour on the back. Both grew very rapidly.

PHITHEIRIASIS.—The *Deutsche Klinik* for January, 1867,

contains the melancholy tale of the Emperor Arnulf and King Snyo, both victims to phtheiriasis in the middle ages. The former worthy was supposed by some of the old chroniclers to have brought on his disease by eating garlic. The passage quoted to this effect by Dr. Husemann, the writer of the article, is quaint beyond measure, and with regard to the Emperor Arnulf is not alloyed with any feeling of pity, as of course no one could entertain the slightest compassion for a person capable of eating garlic.

CHLORINE IN SCARLATINA.—Dr. Dyes, in the *Deutsche Klinik* for February, 1867, strongly recommends chlorine in the form of aqua oxymuriatica for the sore throat which accompanies this disease; having found nitrate of silver, borax, and chlorate of potass all useless. He also gives it internally, almost undiluted. It must of course be kept carefully from the light and in coloured bottles.

EPITHELIOMA DEVELOPED FROM LUPUS.—Hebra has reprinted from the *Wiener medicin. Wochenschr.* for 1867, a most valuable paper on epithelioma growing on lupoid patches, and relates a very interesting case in which he effected a cure. Owing, he tells us, to the very imperfect knowledge of lupus possessed by the older surgeons, we can glean little from their writings, and it is only quite recently that the connexion of common lupus with epithelioma has been subjected to close scrutiny. In 1859 Weber communicated two cases of this kind. Devergie saw two cases of cancer after lupus, which soon ended fatally, and Bardeleben has reported cases of peculiarly malignant lupus; but Weber was the first who made known the transformation of this disease into epithelioma. Hebra noticed the first case of this kind in 1857. The patient was a bookseller, 66 years of age. The disease was seated on the face, and speedily proved fatal. In the second case the disease sprang up in the centre of a lupoid patch on the left cheek. The patient, a woman, sank quickly. The third case was that of a man in whom the disease, seated on the left cheek, reached the size of an orange before death. In the fourth case, almost the whole of the right cheek had been destroyed before the patient came under treatment. Hebra painted the edges with creosote and the centre was covered with lint soaked in a solution of one part creosote and four alcohol, after which a paste of arsenic, creosote, and powdered opium was applied, and creosote injections were freely used. The patient was progressing favourably, when the sudden death of a lad under the same treatment compelled Hebra at once to pause. Rokitsansky, who made the autopsy, said the lad died a natural death from hyperæmia and œdema of the lungs, but Schneider

found morphine in the blood and traces of arsenic in the liver and kidneys, and Hebra, with that spirit which distinguishes him, stated that he believed absorption of the caustic to be the cause of death. The patient was obliged to leave Vienna, which he did, very much improved, though no further applications had been made; but up to the date of writing Hebra had not heard anything further about him. The cure spoken of was effected in a man who had on his right cheek a growth of this kind, the size of a child's fist. To this was applied a compound of concentrated muriatic acid, chloride of zinc, and chloride of antimony, rubbed into a paste with liquorice-powder, caustic potass being subsequently applied. The pain from the first application seems to have been most severe, but the result was gratifying in the highest degree.

PHTHEIRIASIS.—In the *Wiener medizinischer Presse* Hebra goes at full length into the subject of phtheiriasis, and in a spirit of genuine heresy decides against it. Though writers almost without number, from Aristotle down to Alibert, have told about the victims of this mysterious and incurable disease, and related how pagan heroes, blasphemers, and persecutors had been consumed bodily by those detestable vermin, he declines even to weigh their testimony against the evidence of scientific research. He is as deaf as an adder. He clearly won't believe that Sylla required the help of several persons to clear away his lice, or that Tabora's body was so full of these pests that two slaves did nothing else than fill baskets full with them, and carry them to the sea, into which they were flung. Perhaps this incredulity is not so very unnatural, as one would feel tempted to fancy that under such circumstances two active persons would soon have carted their master bodily away. Hebra recognizes only three kinds of lice, those infesting the head, the clothes, and the pubis, and denies that any of the three can pierce the skin or live beneath it; they have no ovipositors, and therefore cannot lay their eggs under it. Nor does he concede to them the power of generating disease; they irritate the skin till the patient scratches it, and the scratching brings on desquamation, staining, pustules, boils, &c.

LEPROSY.—In the *Annali Universali* for December 1866 and January 1867, Dr. Brunelli discusses the subject of leprosy in Crete, a disease which the writer considers so protean in its character that there must be almost as many opinions as writers about it. It is very prevalent in the island, although nearly every leper is isolated, *nolens volens*, so soon as the nature of the disease becomes manifest. He says the lepers themselves recognize three forms—the stumpy or contracted,

the purulent (*i marcosi*), and the knotty; but he himself divides the disease into the atrophic or mutilating form, comprising cases marked by loss, contraction, and paralysis of the extremities, and the hypertrophic, which he subdivides into the leonine and tubercular. The leonine, in which there is falling of the eyebrows and eyelashes, with swelling and hypertrophy of the skin and cellular tissue of the face and extremities, is peculiar to persons of sanguine temperament. The tubercular form is to be separated from the elephantiasis Græcorum, which is the most composite of all, presenting phenomena characteristic of each of the three divisions. These may run more or less into each other, and the more composite the form, the shorter its duration. The course of the disease is slower in children than in adults; but even in grown persons may last ten or fifteen years in the early stage, or even endure for life. In fifty-five living persons he found the duration of the disease from three to forty years; in seventeen of these persons it had, according to their account, lasted more than fifteen years. Dr. Brunelli divides the disease into four stages: 1. That of the prodromata; 2. the stage of mobility, or that in which the first symptoms come and go; 3. that in which the disease is permanently established and progresses; and 4. the stage of general decay. He, however, warns us that this is merely an arbitrary division. Among the prodromata are noticed great weakness, chills, and flushes, abundant perspirations, frequent and profuse epistaxis, numbness and weight in one or more members. Great excitement, both cerebral and arterial, often precedes an outbreak of the disorder, and the patients often suffer from a sense of intoxication, thirst, and internal heat. During the febrile exacerbations, the urine sometimes becomes of a dull bile-colour, or sanguineous. Generally this fluid is of a yellow, or dull-yellow colour; often grumous when the patients are worse. He never detected albumen in it. Dr. Brunelli has not remarked the complaint in infants, but he has been informed that children born of a leprous mother are sometimes attacked with a general papular or pustular eruption, and die in a few months. His experience seems clearly to be in favour of the view that the virile power is diminished in leprosy; in five persons suffering from the leonine hypertrophic form, he found it had greatly declined in one, and was quite lost in the other four: impotence begins at an early age. Sterility prevails among the women. Indeed these lepers are, from the beginning, slow of comprehension; they are generally gloomy, irritable, and easily wearied; they are very sensitive to atmospheric influence, especially those of the scirocco and

rainy weather; they are easily affected by cold, which chills them, and by the sun, which brings on vertigo. The complaint is more frequent in men than in women, and seems most common in the sanguine and nervous-bilious temperaments. Great mental agitation seems to hasten its development very much. The author gives a very full and careful account of certain symptoms which accompany leprosy; such as stains, vesicles, papules, tubercles, tumours, ulcers, &c., each being fully described under a separate head, with its appropriate title; a most excellent plan, as the reader, anxious to know the value of any particular factor, will find here at a glance all he wants; the form it assumes, the course it runs, its frequency, and other peculiarities. Under the head of spasmodic movements (spasmi) he describes some symptoms which will perhaps be new to our readers as accompaniments of lepra. One patient moved his eyes from left to right with the regularity of a pendulum, nor could he by any effort prevent the recurrence of this strange symptom. Some cases, too, were seen of permanent spasmodic tic of the eyelid of one eye only. Brunelli found the venous blood had a deeper hue than natural, but never saw it of an intense black. In every case it was more or less wanting in brightness, or was turbid, as if agitated. In the more aggravated cases, and at an advanced stage of the disease, it has the appearance of lees of wine mixed with water. When allowed to flow on glass, a fine marbled stain forms in twenty or thirty seconds; under a low magnifying power; this is seen to be composed of groups of globules, not in the form of pillars, but in clusters of different sizes, separated by spaces containing isolated granules more or less colourless. In fifteen per cent. of the cases the serum of the blood was red, in twelve it was milky, and in the rest greenish or yellowish. He could not trace any constant relation between the buffy cup of the clot and any particular form of leprosy. He cannot attribute leprosy to a dyscrasia, but thinks that besides excess of fibrine there may be in the blood other morbid principles, each of which may have a special chemical influence on one or other of the different tissues or organs. The course of some cases bears at the outset a suspicious resemblance to syphilis; but, apart from other indications, we do not find in syphilis the excessive irritability of the skin and underlying tissues, the dryness and stiffness of the extremities, and abundant perspiration of the trunk, the intense heat and thirst, &c., which we have in leprosy. All he says about the causes of it only shows how profound our ignorance of them really is, and how utterly untenable is every theory as yet put forward respecting its mysterious rise and

strange disappearance out of western Europe. It appears in Crete more frequently in the mountains than in the low-lying districts, and more frequently in those parts of the frame which are constantly washed, such as the face, than in those which are seldom or never washed. It does not spare those who live well and never eat salt meat, fat, pork, &c.; it holds its ground despite of isolation. Dr. Brunelli considers the cause to be essentially endemic (*un fomite morbifico locale*). He calculates there are about four hundred lepers in the island; the proportion to the rest of the population being, in the country, 1 in 669, and in the three large towns, 1 in 5,000. He describes the nature of the soil, water, &c., where it prevails most, at more length than our limits will allow us in the least to imitate, and says that the disease is more frequent in those who drink spring water than in those who use the water of wells and cisterns. His treatment appears to have been more successful than most writers are disposed to admit that treatment ever can be. The hypertrophic form is often materially checked, for a long time at least, by antiphlogistic and lowering treatment, followed by the use of iodide of potassium and arsenious acid, entirely excluding wine, which seems to be decidedly injurious. He gives one very interesting case in which the pernicious action of wine and the benefit which followed from giving it up were very marked. He appears to have cured several cases, in so far at least as the disappearance of symptoms can be considered a cure. The paper is written with great care and ability, and reflects the highest credit on Dr. Brunelli. The subject is handled at great length, the first part in the December number occupying about a hundred pages.

Germinal Matter and the Contact Theory: an Essay on the Morbid Poisons, their nature, sources, effects, migrations, and the means of limiting their noxious agency. By JAMES MORRIS, M.D., Lond.; second edition, pp. 111.

THE INK is hardly dry upon the pen wherewith we introduced the *first edition* of this work to our readers, and earnestly recommended them to read it over and over again, and give its subject a place in their memory, and make it a foundation-point of subsequent thought and future development. That we were right in our recommendation is proved by the speedy demand for a new edition. And we are glad to perceive that the author has availed himself of the

interval to add considerably to the book, and to make it even more useful than it was before. We may sum its merits in a few words; it is the work of a gentleman, addressed to the educated minds of a learned profession; its subject forming the basis of everything which is most interesting in our daily practice, and embracing the elements of future progress. The book should be read by every member of our profession, and especially by those younger members to whom the inspiration has been given to soar above the range of common things and common objects, and to aim at the perfection of our beautiful art, whose motto is and ever shall be: "Aut Cæsar, aut nullus."

Editorial Commentary.

DEATH OF RAYER.

ONE of the most distinguished dermatologists of the age has departed from amongst us; Rayer is no more. Full of years and full of honours, this learned and eminent man has passed away, leaving behind him riches, distinctions, loving remembrances, and the lasting respect and admiration of all who were acquainted with himself, with his labours, or with his writings. He was born in 1793, and died of apoplexy on the 10th or 12th of September, 1867; he had therefore reached his seventy-fourth year. A few days before the last he was active and well, and occupied the chair of the Biological Society, of which he was the founder. Death stole upon him in the night, while he was sleeping calmly; in the morning he was partially insensible; before many hours his spirit hovered above, the empty casket alone remained behind. Eighteen hundred and sixty-seven is a date of gloomy remembrance for our medical brethren; Lawrence, Trousseau, Velpeau, Civiale, Rayer, all gone; and a tear finds issue from our lids as we reflect on our very recent parting with a warm-hearted and philanthropic friend, John Propert, the founder of the Royal Benevolent College.

Rayer was resident hospital dresser under Dupuytren in 1814; and was associated with Cruveilhier as his fellow-pupil. In 1818 he obtained his degree; in 1823 he was appointed to the Hospital St. Antoine, and a few years later migrated to La Charité. While at La Charité he wrote his admirable work

on diseases of the skin, which was published with an excellent atlas; and it was there that he made those important investigations, a knowledge of which afterwards found its way to the public in his *Diseases of the Renal Organs*. One of his favourite branches of study was comparative pathology, and in this pursuit he corroborated and confirmed by experiment, the researches of Elliotson into the pathology of equinia, and demonstrated the contagious properties of that disease and the facility of its transference to man.

It was in 1843 that he was elected to the Academy of Sciences; and in 1849 became the founder of the Biological Society. He also took an active part in the establishment of the General Medical Association. He enjoyed the confidence of the Emperor, to whom he was physician; and had a large practice in the highest circles of society. His daughter was married to the Marquis d'Escayrac de Lauture, and he has the reputation of having amassed a fortune of £400,000. Besides being a member of the Academy of Medicine, he was a member of the Institute; consulting physician to the hospitals of Paris; and president of the Board of Health.

But it is his great work on Diseases of the Skin that gives him the title to a notice in these pages. The second edition of that work was published in 1835, and translated into English by the learned librarian of the College of Surgeons, Dr. Robert Willis. In its English garb it is a thick volume of 1,238 pages, remarkable for the abundance of information which it contains, and for the admirable classification adopted in the arrangement of cutaneous diseases,—a classification embodying the Willanean scheme with a physiological and pathological method especially his own. Rayer's *Diseases of the Skin* must, for all time, be one of the most valuable works of reference in our library, in this important department of medicine. The English title of the work is: “*A Theoretical and Practical Treatise on the Diseases of the Skin; by P. Rayer, M.D., Physician to the Hôpital de la Charité; with an atlas in royal quarto, of twenty-six copperplates, containing four hundred figures, coloured.*”

DERMATOLOGICAL NOMENCLATURE.

IF we express our obligations to Mr. Hoblyn, we shall doubtless be awakening a sympathetic chord in the heart of many of our readers. How frequently the concise, the convenient, and the correct “Hoblyn,” on our book-shelves, has come to our aid when we have been in difficulty, and when we were not

within reach of the more elaborate and stately "Mayne;" but it is almost more than we had any right to expect, that Hoblyn should step down from his accustomed nook in our library and do his best to arouse our enthusiasm in favour of the language of learning and of science. How proudly we remember the lessons that were taught us by our fathers the Greeks, and with what regret do we not all of us see their magnificent language diluted by filtration through the vapid effeminacy of the Latin tongue. A majority of the names of disease which we employ in Dermatological medicine are Greek. Why should they not all be Greek? at least all those that received a name from our Hellenic fathers. Such words are always more grand, always more expressive, than the words which in their place have been interpolated by their Latin successors. The scholar will not hesitate to agree with us that such a restoration would indeed be much to be desired; and we misapprehend the student of the present day if he also be not ready to think the same. By a kind of divination of our own, we conclude that he is ready, and therefore we hesitate no longer to set up the Greek altar, and worship Science in her native tongue. If we had any scruples left, and we must confess that we have not, to enunciate this classical innovation, they would tend in the direction of terms which have become amongst us as "household words;" for example, urticaria, verruca, lentigo, which are the Latin substitutes for knidosis, myrmekia, and phakia. But in certain other less cultivated and less familiar fields, such as that of the pathology of the hair, we hesitate not for an instant. The latter subject is comparatively new, and the appropriate vocal sounds for the expression of our ideas may, not unreasonably, be equally new. This alteration which we propose, this reformation of nomenclature, will involve some few changes which we doubt not will be effected with the greatest ease by those who approve the principle of our scheme. A glance at the tables which accompany our paper on the Statistics of Cutaneous Disease among the Wealthier Classes, will tell at once the tale of our intentions; for the future the Greek κ will be represented in our nomenclature by the English *k*; our apology will be simply, that it is correct; that truth is our guide, and that we are nothing more than her humble worshipper. It is whispered, that in a new and forthcoming edition, Hoblyn may follow the example of Grote, "the first historian and perhaps the first scholar of the age, who has boldly discarded the effeminate *c*; and gives us Sokrates, Perikles, Nikyas, Sykyon." Can we then resist any longer to accept as the proper reading:—Ekzema, akne, alo-

pekia, karkinoma, kakotrophia, ekthyma, leukasmos, sykosis, and akrochordon.

Only one word more, a simple quotation from two of our great English medical authors, Willan and Mason Good, on a similar topic. Willan observes in reference to the term scarlatina: "However offensive the term may be to a classical ear, it cannot well be displaced, having found admission into all the systems of nosology. Another age will correct and refine the language now used in subjects untouched by the masters of physic." To which Mason Good replies: "It will not be the present author's fault if the correction, so generally called for in the case before us, should be postponed to another age; or the error complained of be chargeable on future nosologists." Huxham tried to escape the abominable word by adopting the term "febris rubra;" Heberden attempted to evade it by the same expression; Mason Good proposed "rosalia;" but still, with a sublime consistency in wrong, we retain the word; and so it will be for ever. Our proposition may meet with a similar result. We hope not. A singular blunder is at present being perpetrated in the use of the word psoriasis; but we trust, with a rising and better instructed generation, to see that also wiped out.

DR. RICHARDSON'S LECTURES.

"DR. RICHARDSON requests the honour of the company of A. B. on Tuesday, November 12th, at 4.30 p.m., to a Lecture on the Action of Narcotizing Gases and Vapours." Such is the invitation which the scientific philosopher bestows on his scientific friends; and such was the invitation that drew together a goodly meeting of earnest and thinking men on the above-mentioned date. The lecture theatre was a back room in Dr. Richardson's house; great care and ingenuity had been bestowed upon it to render it fit for the purpose; but nevertheless, out of the select few who received invitations, there were some who experienced the inconvenience of so large an assemblage in a necessarily limited space; and there were more than one who felt that that learned lecture would have fallen with more grace upon the ears of the audience had it been delivered under the expansive roof of the College of Physicians. In truth the College of Physicians could never be more honoured than in honouring her sons and giving a shelter to and a helping hand in the diffusion of medical science. All we would stipulate for, if she ever do comport herself so nobly and so much to her own honour, is, that she won't leave her brother doctors of

Lincoln's-Inn Fields at the outside of her door. On the present occasion the feeling of gratification was universal, commingled with the one regret that so few were able to enjoy the privilege.

Dr. Richardson pointed out that the germ, the *nota primitiva*, of anæsthetic medicine was embodied in a few words of Sir Humphry Davy on the effects of laughing gas, and its possible adaptation to the purpose of benumbing sensation and relieving pain. The catalogue of anæsthetic agents is somewhat numerous, embracing as it does nitrous oxide gas, carbonic oxide, the methyls, the ethyls, the formyls, with hydride of caproyl, and several more. And it is worthy of remark that these agents present the greatest possible diversity of chemical composition and form, and equally differ in their characters of combustion and support of combustion, in their boiling temperature, and in their specific gravity. In seeking out a special character and special adaptation to the production of anæsthesia, the quality of most importance is that of specific gravity; the lighter the body the more rapid will be the diffusion, and, as a consequence, the more transient the result; whereas, in the heavier bodies, although the effects are slower in their advent, they are more complete and permanent. In this manner the capability of producing anæsthesia in a given agent may be predicted by its specific gravity alone before it is subjected to the test of experiment. And in the selection of an anæsthetic agent it is desirable to weigh carefully in the mind both the degree of specific gravity and the susceptibility of the agent to external conditions, such as atmospheric diffusibility and temperature. Carbonic oxide having a low specific gravity, namely 14, destroys life very quickly; but if the atmosphere of mephitic gas be removed before life is totally extinct, life returns with equal rapidity. Carbonic acid being represented by the figure 22, is also a quick destroyer, and at the same time an agent from which recovery may be expected speedily. Then there is the bichloride of methylene, with a specific gravity of 42, which is slow of diffusion and equally slow of elimination, and therefore possesses the very important quality of stability.

The subjects of the present lecture were, nitrous oxide gas, carbonic oxide, bichloride of methylene, chloride of ethyl, hydride of caprol, and a compound of chloride of methyl with chloroform. In each instance the lecturer illustrated the properties of the agent by an experiment, showing its mode of operation and its effects upon the heart and upon the blood. Nitrous oxide gas, bichloride of methylene, and chloride of ethyl darken the blood; it is made florid by carbonic oxide

and hydride of caprol, and coagulated by chloroform. In some instances the blood is found accumulated on one side of the heart after death; in others the balance of circulation is undisturbed, the heart and respiration seeming to die together; and in most instances a persistent muscular irritability is shown to be present by the continuance of a throbbing action in the muscle, especially of the right auricle, three or four hours after the death of the animal.

At a previous date, October 8th, Dr. Richardson delivered a lecture on the bichloride of methylene, comparing it with ether and chloroform in respect of its powers of producing anæsthesia, and leading to the expectation that it may one day take the place of those now popular therapeutical agents. The *British Medical Journal* in its report on the proceedings of the British Association remarks on the researches of Dr. Richardson into the physiological importance of the methyl compounds, namely, —*methylic alkohol*, which is more rapid and less prolonged in its effects than simple alkohol; *hydride of methyl*, *methene*, or marsh gas, which may be breathed with impunity by certain animals, and the *iodide*, *bromide*, *nitrate*, &c., of *methyl*. With regard to the *perchloride* or *tetrachloride of carbon*, he observed that he found it “not only frequently adulterated, or, at least, impure, as shown by the extremely variable boiling-point of specimens experimented with, but also decidedly a very undesirable anæsthetic. Its elimination from the body is extremely slow, a fact fully accounted for by its boiling-point, and it very speedily and completely destroys muscular irritability. It is far more dangerous than chloroform, and though in its action it presents the same four stages as that agent, the second stage is prolonged and intensified, and is sometimes accompanied with tetanic convulsions. In the *bichloride of methylene* or *dichloromethene* (CH_2Cl_2) boiling-point 88° Fahr., with a vapour of sweet odour, Dr. Richardson found a new and apparently very valuable agent, a gentle and perfectly general anæsthetic. Under its influence animals lapse into the third stage of anæsthesia, with the slightest exhibition of the stage of excitement; the insensibility is deep and well sustained, and the recovery quiet and good. The muscles retain their irritability for a long time after death, and the blood is unaltered in its physical properties. In short, it combines the anæsthetic power of chloroform with the safer properties of ether. In conclusion, Dr. Richardson expressed his conviction that “from the study of the effects of these organic compounds on the animal organism, a guiding principle was making itself seen which must in time lead to a sure basis for a science of therapeutics.” To such workers as Dr. Richardson, who

bestows his labour most freely and with no return but the satisfaction of having contributed to the development of truth and the advancement of human science, the profession is more deeply indebted than it wots of. We do not, however, despair of seeing his labours one day rewarded as they deserve.

SODA-WATER.—There is a thirsty freshness in the very utterance of the words soda-water, and with soda-water and sherry, soda-water and claret, soda-water and brandy, soda-water and milk, we have a world of drinks that are equally agreeable and salubrious in health and in sickness, and at every season of the year; even our national liquor grows “pale” and “small” by the side of its effervescent rival. But the chief constituent of soda-water, the fluid element, must be free from unwholesome tincture, otherwise we are little gainers by the beverage. In selecting a dwelling, in a change of residence, one of the first inquiries that the man of experience makes relates to the wholesomeness of the water; or if we seek a temporary change of abode, it would be better, if we have any doubt, to trust to the tap of the soda-water manufacturer than venture to battle with dangers that we wot not of. We are in Margate, reader, enjoying our *villeggiatura*, and a glass of Company’s water is before us, murky-looking and red, its guilty blush, in reality, only the reflection of the inner coat of its iron arteries; but we do not at present stand in need of either Spa or Schwalbach, Brückenau or Tunbridge Wells; and so, for the water, we like it not. Then our hostess offers us a glass sparkling and fresh from the garden pump, and to the eye perfection; but we suspect its truth; we have heard of organic matter, of filtration of cesspools; of deterioration of wells; and although the water in the chalk is usually of the finest description and most perfect flavour, we prefer to retain our thirst than trespass on the goodness of our pleasant hostess. But we have an alternative; we know of a well that is always flowing, always fresh and cool, always wholesome,—it is the well of Reeve & Co., the soda-water manufacturers; and all unshriven indeed is that pilgrim to Margate who has not made acquaintance with Reeve’s soda-water. Its virtues are easily summed; it is water from the bed of the chalk, uncontaminated by the drainings of the town, always moving and flowing, and of a temperature cool, the most favourable for solution of the soda and imbibition of the carbonic gas. Has our reader never tasted soda-water that was flat, or tasteless, or nauseous? We have, so often, that we are always curious to know the bin from which our beverage is drawn, and

now we have *the book* to guide us ; for does it not say, that is, the British Pharmacopœia, that our soda-water should have “an agreeable acidulous taste,” and should contain of bicarbonate of soda, thirty good grains to every pint. Of the Margate water we have the analysis before us, and that of another soda-water of excellent quality, manufactured by Provost of Huntingdon. The following are the remarks and analysis of the latter, from the laboratory of Mr. Redwood. The Huntingdon water “has all the qualities of a good drinking-water, being very bright and free from any tint of colour ; free also from any organic impregnation that could impair its taste or smell, and having the sparkling character and agreeable taste of the water derived from a chalk formation. It contains the following saline constituents in one imperial gallon :—

Carbonate of lime	.	.	.	.	17·7 grains.
Sulphate of lime	.	.	.	.	7·1 „
Sulphate of magnesia	2·0 „
Nitrate of lime	2·2 „
Chloride of sodium	4·0 „
Silica	0·5 „
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We think we have said enough to show our readers that goodness and wholesomeness are not the necessary accompaniments of the green bottle, nor of the stamp it bears ; but that we should also pay regard to the source of the water, and those other conditions of chemical constitution and manufacture, that are so necessary to the production of a good soda-water.

TOILET SOAPS.—If it be well to wash the skin—and we never heard the proposition questioned—it is well also that we should be familiar with the means with which that purpose may be most efficiently attained. We once knew a beautiful woman, with a nice complexion, who had never washed her face with soap all her life through ; her means of polishing were, a smear of grease, e.g. cold cream, then a wipe, and then a lick with rose-water. Of course we did not care to look too closely nor to approach too closely after such an avowal ; and we have met in the world with persons so unfortunate as to be unable to bear soap to their skin at all. We pity both ; for soap is the food of the skin. Soap is to the skin what wine is to the stomach, a generous stimulant ; and a solvent to boot of the surface which holds the dirt. It not only removes the dirt, but the layer which carries the dirt, and it promotes the displacement of the old cuticle to make way for the new, to

increase the activity of change in the skin; it is the essence of reproduction, because it creates the want, the law of living organization. We, of the present day, can hardly be too thankful for the withdrawal of the prohibition of the excise upon the manufacture of soap, inasmuch as it has been the means of providing us with variety, with choice, and with excellence. Turn we to toilet soaps, and there we find a name engraven on the memory of the oldest inhabitant, Pears—Pears' transparent soap, an article of the nicest and most careful manufacture, and, scentless or scented, one of the most refreshing and agreeable of balms to the skin. We stay not in the question of transparency to explain how came it so; but we may remark that transparency adds considerably to the costliness of the soap, on account of the necessity for a more elaborate process of preparation. Then there is our old friend, the elder-flower soap, Carrick's elder-flower soap; so sweet, so agreeable, so wholesome, and we may tell a passing tale of the elder-flower soap. We were one day closely pressed by a lady as to our belief in the goodness of this soap, and we put the case somewhat thus: "And now will you inform us why, seeing that you confess to liking the soap and thinking it the nicest you ever used, why you should ask the question?" "Because," said the lady, "I have been in the habit of paying a shilling a cake for toilet soap; and of this I find that I have three cakes for my shilling." This was a sterling English reason, and highly complimentary to the soap. Then we have medicated soaps; an eminent chemist made, at our request, carbolic acid soap. We approved its operation; when, some months afterwards, and to the momentary ruffling of our equanimity, McDougall Brothers whispered in our ear that we were infringing a patent, *their* patent for utilizing carbolic acid in all its shapes and types; but as McDougall Brothers informed us that they manufactured the carbolic acid soap, our effervescence as to the right of the British subject, &c., &c., subsided, and we were glad to lay in a store of, and prescribe, McDougall's carbolic acid soap. If thou wouldst be sweeter, sweet reader, do likewise. Carbolic acid removes impurities of every kind; destroys septic and organic germs and ova, and those that produce them. Need we speak more openly. Our friend Professor Pepper, returning a short time back from the Paris Exhibition, with his wonderful budget for the Polytechnic voyageurs, dashed us off a note, of which the following is an extract:—"Group 5, class 44: M. Bobœuf, No. 9, Rue Buffault, a most distinguished practical chemist, exhibits—Phenal soap, a combination of phenic acid and soda;" with a puff of

course, thus: "Pimples, greasy or dry scurf, disappear when the hair is dressed with a comb moistened with a small quantity of phenate of soda or phenal soap." A day after the fair, *mon cher*; ask McDougall Brothers, &c., for we need hardly remind our readers that phenic acid is another word for carbolic acid. Then we have Morstatt with his juniper-tar soap, his essence of tar soap, and his Stockholm tar soap, all useful medical remedies and invaluable in pruritus of the skin, and the special disorders to which they are applicable; worthy successors of the petroleum and petroline soaps of Hendrie, but more decidedly therapeutic in their operation. Morstatt prepares these soaps with extreme care, and they may be thoroughly depended upon for the excellence and proper proportion of their ingredients. The enumeration of medicated soaps is a catalogue of no mean length, and we must express a sense of obligation to the manufacturers for the zeal with which they have stepped in so soon after the abolition of the excise laws to fill up a chasm in our wants, for the which the medical profession and the public must feel most thankful. We find in this list an oxide of zinc soap, camphor soap, the sulphur soap of Mollard and Morstatt, a gas-tar soap, and the neutral soap of Morstatt, carefully divested of its excess of alkali, and adapted for nurseries. The present is without doubt an age of cleanliness, and we have no need of urging the command: Wash ye, and be also clean.

ANTISEPTIC TREATMENT.—Through the courtesy of Mr. Knight Treves, the house surgeon of the Margate Infirmary, we have had the opportunity of seeing the wonderful results of Professor Lister's plan of antiseptic treatment. A few days since we were present when a recently amputated stump was opened for dressing; the wound had the appearance of being united, but upon the application of slight pressure, about two ounces of offensive pus poured out from between the lips of the flaps at various points, and proved that the promise of healing was but an empty show. At our suggestion, the end of the stump was covered up with a thick fold of lint saturated in an oleaginous solution of carbolic acid. By the next dressing on the following morning there was not a vestige of pus to be found, and two days later, when we again saw the stump, the line of union of the flaps was marked with pinkish, healthy-looking granulations, and suppuration was at an end. The appearance of the patient was also remarkably changed; he looked fresh and cheerful, instead of pale and anxious, as he had done before. Those who saw the case became at once converts to the

antiseptic treatment, and Mr. Treves expressed his intention of employing the plan very extensively.

But another phenomenon presented itself for which we were unprepared : Mr. Treves had applied the carbolic acid dressing to suppurating openings in several other patients, and in four of these, two men and two children, the result was very remarkable, namely, prolonged and distressing vomiting. One man seemed affected by the odour of the acid, of which he bitterly complained; the other young man found nothing objectionable in the odour, but, on the contrary, approved of it; and no complaint was made of the smell by the children.

Further observation and inquiry will probably determine to what circumstance this unpleasant symptom is to be traced; whether to the mere odour of the acid; whether to the sudden arrest of suppuration and the substitution of a more general disorder of the economy; whether to some impurity in the acid; or whether to the sudden absorption of the acid into the system. At present the latter of these hypotheses would seem the more likely; for, in three out of the four patients, no objection was made to the smell; and another was an instance in which there was no sudden arrest of discharge, the case being one of simple opening of a large abscess. The carbolic acid employed by Mr. Treves was at first the coloured kind, and subsequently the uncoloured glacial acid; and he was disposed to attribute the symptoms to the latter rather than to the former.

If we admit the possibility of the absorption of the vapour of carbolic acid, the remedy presents itself before us in a new character, not as a mere destroyer of septic germs, not as an agent operating upon the simple surface, but as one capable of penetrating the tissues, and diffusing itself throughout the entire system. Having our interest vividly awakened by this new phenomenon, we wrote an account of it to Professor Lister, and in reply, he observes, "I certainly have met with troublesome vomiting in a few cases; I think three, out of all the multitude in which I have now used carbolic acid. But those were all cases of compound fracture, in which the acid was introduced, undiluted, with great freedom into the wound." They occurred since Mr. Lister had used the glacial acid; but during the same period he had employed the acid much more copiously than formerly, and he had seen no such consequences where it was used in a diluted form. The vomiting ceased after the first twenty-four hours. He further observes that the acid "is certainly absorbed by the skin, and may be detected in the urine after external application."

In a subsequent report from Mr. Treves, dated November

5th, he observes, "I have mixed the acid with three parts of oil, and have used about an ounce and a half of this mixture for each application. I have in no case injected it into an abscess or wound, but merely applied it externally. My object has been to get an atmosphere of carbolic acid about or in the part, and the vapour has doubtless entered the wound. I have used the acid in 13 cases; 10 of the patients have vomited more or less severely; 2 in whom I applied a little of the 'putty' only have suffered from headache, and in 1, viz. the amputation, it has had no injurious effect.

"The patients have vomited green bilious matter, and in several the urine has been tinged of the same colour, probably from its having contained some of the carbolic acid. The vomiting has commenced within an hour in three cases; generally, however, it comes on in from six to eight hours after the application. The sickness has lasted from twenty-four hours to three or four days, and in a few of the cases the distress and gastric disturbance have been so great that I have been obliged to discontinue the remedy.

"I have used the acid principally with a view of checking profuse suppuration from large abscesses generally connected with the hip-joint, but as yet have had no great success. I found the acid very useful in the following case: disease of right elbow and wrist-joint, extensive destruction of skin, with profuse discharge, rapidly decomposing, and at night polluting the ward. I applied the carbolic dressing, interposing a piece of lint between it and the wounds, on Oct. 29. The discharge is now about one-tenth of what it was, and the wounds are getting smaller; the arm is dressed once a day instead of twice, and there is no offensive smell. In a similar case of knee-joint disease the result was equally satisfactory.

"The man with amputation of the leg is now getting about on crutches, and the stump very nearly healed. I am confident the carbolic acid will prove a very useful remedy from its power of checking suppuration. In the treatment of large abscesses we shall have, I expect, to introduce the vapour into the cavities by means of a drainage-tube placed in the opening, or otherwise; as I have used it, I do not think it has been of much use in these cases.

"As regards the saturation of the system with the acid, one of the cases is interesting, in that for a couple of days after I left off the dressing the patient continued to pass the dark-green water, and to vomit the same coloured fluid."

Professor Pirrie, of Aberdeen, under date October, 1867, reports in the *Lancet* the successful operation of carbolic acid in an extensive scald, and in the healing of a blister. In the

former case he employed a liniment containing one part of acid to six of oil. The pain of the scald was alleviated in ten minutes; and by the twelfth day the skin was healed, without suppuration and without any constitutional disorder. He also notes the occurrence of vomiting, "which continued for two days;" but he does not connect this symptom with the acid, as we are inclined to do. A blistered surface, treated in a similar manner, became painless in fifteen minutes, and healed rapidly without suppuration.

Sir James Simpson, also in the *Lancet*, and at a similar date, does good service to medical science by reminding us of the relationship of carbolic acid and kreosote, the latter being derived from wood-tar, the former from coal-tar: kreosote being, in fact, an impure carbolic acid, united with a hydrate of cresyle. The application of kreosote to surgical purposes, and its continued use at the present time, are well-known facts, and serve to introduce us to the use of coal-tar and carbolic acid. A learned treatise on kreosote was published by Dr. Cormack in 1836; and that substance was employed in the Edinburgh Infirmary, as a remedy for burns, by Dr. Handyside in 1842.

We next hear of carbolic acid, or rather of coal tar, adopted for surgical purposes, in 1859, when its merits were lauded by Corne and Demereux, Cabannes and Le Bœuf. At first it was combined with sulphate of lime, in the proportion of one part of tar to twenty of lime, and used as an antiseptic powder, or mixed with an oil or fat and applied as a poultice. Then other combinations were tried, and notably, an emulsion of coal-tar with soap, very nearly resembling the solution with an absurd name which we use at the present time, namely, the liquor carbonis detergens. The idea of deterging would seem to have had its origin with Lemaire, who observes: "When a wound is recent, saponified coal-tar prevents the formation of pus. If the wound is of old standing, it *deterges* the diseased parts, disinfects them by killing the living ferments, and diminishes rapidly the suppuration by protecting the tissues and the products which they secrete from a new fermentation."

It was left to Calvert in England, and Parisel and Bouchardat in France, to discover that the active agent in coal-tar was carbolic acid, and a new opportunity for experiment was thereby given to the subject. In 1863, Lemaire, of Paris, published a monograph on the employment of phenic acid, the French denomination of carbolic acid, and the volume was received with so much eagerness as to call for a second edition in 1865; and in the latter year a work on the same

subject was published by Declat. The range of inquiry embraced by Lemaire may be inferred from his title-page—"De l'Acide Phénique, de son action sur les végétaux, les animaux, les ferments, les venins, les virus, les miasmes, et de ses applications à l'industrie, à l'hygiène, aux sciences anatomiques, et à la thérapeutique." While the title of Declat's work is as follows :—"Nouvelles Applications de l'Acide Phénique en médecine et en chirurgie, aux affections occasionnées par les microphytes, les microzoaires, les virus, les ferments, &c." Declat employed the remedy with great success in an extensive gangrenous wound of the thigh, in the form of a lotion containing one part of acid to ten of water; and Maisonneuve, of the Hôtel Dieu, adopted the process on seeing its happy results in Declat's case, and continues to use very commonly a solution of one part of the acid in a hundred of water.

Lemaire advocated the use of carbolic acid as a means of arresting pyogenesis, and of destroying septic germs. "I can arrest," he says, "and reproduce at will the formation of pus, as I am able to arrest and reproduce fermentation and germination." And he recommends its adoption in a great variety of surgical affections; for example, besides compound fractures, suppurating cavities, abscesses and recent wounds, to scrofulous ulcers, burns, venomous bites, dissection wounds, sloughing and gangrenous sores, inflammation, caries and necrosis of bone, inflammation and abscess of joints, whitlow, carbuncle, lupus, cancer, ozæna, otorrhœa, chancre, gonorrhœa, catarrh of the bladder, fistula, cysts, &c.; as also in certain cutaneous diseases, and certain internal affections. It is an ectrotic in small-pox, and in vapour or solution is applicable to aphthæ, angina, diphtheria, croup, and whooping cough.

Dr. Hingston, Professor of Surgery at the McGill College in Montreal, remarked at the Dublin meeting of the British Medical Association, that he had found, in his travels through the Continent of Europe, that the use of the acid had been in some measure discontinued, in consequence, apparently, of the abuse and mismanagement of a very valuable and incomparable remedy.

ROBERT WARINGTON.—We regret to see announced in the obituary of the *Times*, the death of an old friend to whom the scientific world is indebted for the utilization of glycerine. Robert Warington died on the 12th of November, 1867, at Budleigh Salterton, at the age of sixty years. Warington was an early pupil of University College, and imbibed a knowledge of chemistry in the class-rooms of Turner and

Thomson. Subsequently, he was appointed to the chemical department in Apothecaries' Hall, and in the course of his duties there, was struck with the singular properties of glycerine; its sweetness, without containing sugar; its syrup-like consistence; its clearness and transparency; its property of resisting evaporation; and its general blandness of character. It was furnished by the process of saponifying lead in the preparation of *emplastrum plumbi*, and being thought to be useless, was allowed to drain away into the common sewer without further notice. Warington, however, saw this waste with regret, and having some empty and unemployed carboys on hand, he collected the glycerine, and stored it away, on the chance of a use being discovered for it. He found it valuable in the mounting of objects for the microscope, and mentioned its properties to his medical friends; amongst others to Mr. Startin and ourselves. It was not long before we were startled by the complaint of one of our patients of the extravagant price of the substance. We had recommended it as inexpensive, and we soon discovered that Warington's hoard was exhausted, and that the enhanced price resulted from want of supply. Then a supply was obtained from the soapboilers, but was so inferior to the first, and so offensive in odour, that glycerine for a while lost its popularity. Its reputation, however, was eventually restored by passing into the hands of Price's Candle Company, by whom the best glycerine in the market is at present manufactured. In the hands of Warington, and with a prevision of its future utility, glycerine was a waste product of no value whatever by the side of the materials from which it was obtained. Soon, however, the product rose to occupy the first place, and the materials were sacrificed in its production; and for this we have to thank the foresight—the providence of Warington; for the increased consumption of the article was the best proof of its usefulness to man, and glycerine occupies at present an important place in the *British Pharmacopœia*. The reputation of Warington and glycerine will, for all time, be inseparable; and we know of no more glorious monument than the association of man's name with an object of acknowledged utility to man.

Clinical Memoranda.

LEPRA ELEPHANTIASIS LOCALIS.—The Leprosy, or Elephantiasis Græcorum, is, as far as we know at present, a blood-disease, of the nature of an intermittent fever ; that is to say, it originates in some unknown conditions of climate or soil, it remains for a long time latent in the system ; and when it is developed, it assumes the customary formula of fever, having its stage of chill and reaction, the period of reaction being manifested by an exanthema which subsequently undergoes further changes. The chief influence of the poison, whatever it may be, is exercised upon the nervous system, sometimes on the peripheral plexuses of the nerves, sometimes upon their trunks ; and in this disease, as in many others, it is made apparent that where the periphery suffers most, the deeper nerves escape the most lightly, and *vice versâ*. This peculiarity of a more superficial or a deeper influence, is the ground of the division of leprosy into *tubercular* or superficial leprosy, and *anæsthetic* or deep-nerve leprosy ; there is also manifested a distinction between a general and a local anæsthetic leprosy, of which latter the lepra elephantiasis articulorum, or joint-evil, is an example.

From these phenomena of leprosy we make the following deductions :—
1. That the disease may invade the surface of the body chiefly ; 2. that it may affect the deeper branches and the trunks of the nervous system chiefly ; and 3. that it may attack a part of the body of limited extent. And this latter division of the subject we propose to illustrate by two cases that have lately fallen under our observation.

As we are not at present discussing the cause of the disease, we have not thought it necessary to refer to other sources of origin, such as heredity and contagion ; but both these causes, under particular circumstances, are no doubt active in the propagation of the disorder.

The first case to which we wish to draw attention, is that of a lad of seventeen, the son of a quartermaster in the Indian army. He was born at Worzeerabad in 1850, and was sent to England to complete his education in 1865, at which time he came under our care. His mother was born in India, and his four sisters and one brother have always enjoyed good health. Before he left India our patient had sore throat, ague, and fever, from which he has quite recovered ; and at the present time he considers himself to be quite well. In appearance he looks his age, and presents no sign of deficient health, with the exception of an anæmic whiteness of the conjunctiva. His application to us arose from the occurrence of what he called a ringworm, on the left side of the back of the thorax. The supposed ringworm had been painted with some stimulant application at school, but evinced no disposition to disappear. It was a circular spot, three inches in diameter, consisting of

a belt of three-quarters of an inch in breadth, surrounding an area of about two inches. The colour of the belt was a bright red-brown, or copper-colour, dotted with puncta of a deeper colour, corresponding with apertures of the follicles ; while the tint of the area was a faded yellow-brown. There was no infiltration, and consequently no prominence ; the surface was smooth, the epidermis being unaffected ; but the discoloured patch was somewhat anæsthetic as shown by pricking with the point of a pin.

There was a second and similar spot on the left arm, three on the right leg, between the knee and the ankle, and a knotty thickening of the lower segment of the prepuce, accompanied with a slight œdematous infiltration. The maculæ on the leg were remarkable for their loss of sensibility, and presented a pityriasic desquamation of the epidermis. There was as yet (June, 1866) no affection of the hands or of the feet ; nor, indeed, of any other part of the body. The five circular and annulated patches are the forerunners and sole representatives of that terrible disease elephantiasis ; and it is not unlikely that the ague, the fever, and the sore throat already spoken of, may have been the premonitory constitutional manifestation of the leprous fever.

His father makes the following statement of the young man's early history:—He was a remarkably fine child ; was nursed by his mother only, and remained under her care until the age of nine, and during this period suffered no illness whatever. In 1859 he was sent to La Martinière College at Lucknow, where he remained until December, 1864, and the following year embarked for England. He suffered in 1861 from what was called ringworm, “which turned into troublesome sores, and took some time to cure ; but then it was a cure ; the boy was as healthy as ever afterwards ; neither did it leave any indelible marks on his flesh ; indeed, I never remember his having any other illness than a little fever and ague in 1862, and that very trifling.” He was vaccinated in 1852 at Meerut, the lymph being taken from a healthy child, but whether native or European is not certain. “The rest of the children are very healthy ; so also is his mother and myself ; the only illness I have ever experienced being an occasional attack of fever and ague.”

It was upon the trivial appearances, just described, that we pronounced the case to be one of *lepra elephantiasis* in June, 1866. It is not certain how long these appearances may have been in existence, for there very generally exists among lepers a happy state of hebetude as to their state and to mental impressions, that renders it difficult to arrive at the exact truth. This fact is evinced in the patient before us. His application to us, sent by the master of his school, was for ringworm. A glance at the supposed ringworm induced us to inquire if he had been in the East. Next we insisted upon stripping him, and then only did we discover the discoloured blotches on the forearm and shin ; and were enabled to verify the diagnosis suggested by the spot on the thorax.

The subsequent history of this patient to the present time (September, 1867), we will briefly narrate. Early in July, 1866, he was seized with pain in the ulnar side of the left forearm. The pain began at about four o'clock in the morning, prevented any further sleep, and sometimes lingered the whole

day. It was dull at first, then became acute and almost unbearable, and assumed a darting character in the little and ring finger. It continued for about a month, and then gradually subsided. Accompanying the neuralgic attack, there was increased hyperæmia of the blotches of the skin; some thickening from infiltration of the skin and subcutaneous tissues, and a peripheral extension of the superficial redness; and when the pain subsided, these cutaneous appearances gradually diminished; the redness of the blotches retreated to the circumference, producing an annulate border, and the area threw off a pityriasic desquamation. Moreover, the hyperæmic blotch, which, during the neuralgic stage, was exquisitely sensitive, had now become numb and insensible.

Consequent upon the subsidence of the neuralgia, the second and third phalanges of the little and ring finger became flexed; the first phalanx was drawn slightly backwards upon the dorsum of the hand, so as to protrude the heads of the metacarpal bones, and the wrist was somewhat raised upon the forearm; and accompanying this distortion, the result of muscular paralysis; the fingers became attenuated from diminished trophic power, and benumbed from exhausted nervous influence. At a later period he recovered, in a slight degree, the sensation and motor power of the fingers; but the contraction and paralysis will probably be permanent.

In November he called our attention to the state of his leg; the large erythematous blotch, with a desquamating and pityriasic surface and red border, occupied its front; and within the area of the blotch was a circular ulcer of the size of a shilling: the ulcer had perforated the whole thickness of the derma. Its edges were thin, its base red, without granulations, and it exuded a little serous fluid. It was perfectly painless, and his first knowledge of its existence arose from seeing it. We applied the nitrate of silver to its surface pretty freely, but without producing sensation of any kind, and in about a month it healed. Before, however, the ulcer closed, another made its appearance in another part of the leg, and ran the same course, healing in four or five weeks. Later in the year he unwittingly burnt the side of the paralytic little finger with a hot poker; he was not aware of what he had done until a blister rose, and was succeeded by an ulcer, which healed, as the others had done, in a few weeks.

From the period of subsidence of the neuralgic attack, he has been recovering slowly and gradually in every way. There has been no return of pain, but a certain degree of restoration of sensation and muscular power; the hyperæmia and thickening of the skin have diminished, desquamation has become less, and the ulcers have been repaired. In March, 1867, we found an oozing of serum around the circumference of the nail of the little finger, which resulted in the shedding of the nail; and after this he improved so much in every way that it was hardly possible to regard him as an invalid. He made his last report to us a few weeks since (September, 1867); he considered himself to be quite well. We wish we could verify his expectations. The best that we can say is, that for the present, the storm is lulled; when to break out again it is impossible to foretell. The present phase of his medical state is, we fear, nothing better than an illustration of the latent or dormant stage of this terrible malady.

Our second case, which is more decidedly marked as an example of local leprosy, is as follows :—A gentleman, aged 38, a native of Jamaica, the son of an English father and a native mother, resided in that island until the age of 23, when he removed to British Guiana. Guiana is marshy and swampy ; intermittent fever prevails very extensively, as also does leprosy, and the latter is much on the increase in Demerara. In Guiana he suffered from the colony fever, namely, intermittent, which annoyed him during the four years, 1854-57. He ascribed the origin of the fever to frequent wettings, and subsequent drying of his clothes upon his back, and became at length so sensitive to the influence of the affection that a damp atmosphere caused by a shower of rain would revive his aguish symptoms, as also would any derangement of stomach and the use of certain articles of food. During the next seven years he suffered from severe headaches, of a nervous type, and apparently a modification of the original ague, for after the trial of a variety of remedies, the headaches yielded at length to sulphate of quinine.

About a year after the cessation of the headaches, namely, in May, 1865, two years and three months ago, he observed the first symptom of his present disease, a local form of leprosy. He one day noticed, while in his bath, that the back of the left leg, from the ham to the heel, had lost its sensibility ; that he could prick the skin without exciting pain ; but there was no other symptom of disorder, no pain, and no uneasiness, and even to the present time the only symptoms that he has ever observed have been a slight feeling of heat or burning, and sometimes of weight, but no itching and no pricking. His next observation occurred a month later, when he perceived a dull redness over the tendo achillis, of little more than the breadth of the tendon, and extending from the os calcis upwards for about six inches. This reddened portion of the skin he found to be more sensitive to the touch, and a little thicker than the neighbouring healthy skin, and it has subsequently thrown off from time to time a thin epidermic desquamation. A third symptom was first brought to his attention by ourselves, when we inquired for what length of time the back of the leg had presented its present bleached appearance. His first reply was, that he considered that to be the normal colour, but he soon discovered that it was a white blotch, a veritable leuke.

In a few words, upwards of two years ago, there was a manifestation of anæsthesia. Next followed redness, with infiltration of tissue and desquamation ; concurrently with redness hyperæsthesia of the hyperæmiated skin ; and lastly, the leukasmic change, the arrest of pigmentation. And all these symptoms were present on the leg at our examination, and were strictly limited to the left leg from the knee downwards. The back of the leg was bleached and insensible, without any apparent change of structure. Above this, close to the bend of the knee, there was a large blotch of infiltrated and thickened integument, about two inches long by one inch in breadth, of a deep red-brown colour ; by the side of the calf a second blotch less than an inch in diameter ; and on the tendo achillis, a third, about six inches in length, by two in breadth, infiltrated and flabby, and covered by a smooth, glossy cuticle. The leukasmic portion was bounded on each side by an abrupt line, the skin forming this boundary being somewhat reddened and sensitive, while the skin of the rest of the leg was manifestly more

hyperæmiated than that of the sound leg, and here and there presented erythematous patches of a dull red hue, with a melasmic tinge of the epidermis, and aslight roughness caused by loosening and desquamation of the cuticle.

It may be thought, and with reason, that this little history developes an unnecessary refinement of diagnosis ; but we know of no disorder of the skin which presents the assemblage of symptoms which are here accumulated together : the anæsthesia, the hyperæsthesia, the leukasma, the melasma ; the peculiar red-brown colour, and brawn-like œdematous infiltration of the blotches ; the dusky erythema and the desquamation of the epidermis.

The case had been shown to several of the medical men of the country, who all declared that they had never seen anything of the kind before ; to the patient only had occurred the suspicion that it might be incipient leprosy, but he did not mention his suspicion until we had communicated to him our diagnosis. He was a highly intelligent man, and was familiar with “the rose,” the Barbadoes leg, the leprosy, and the kokobay, or joint evil ; and, with West Indians in general, he was accustomed to consider leprosy and kokobay as two separate diseases. We told him that we regarded his disease as a local form of leprosy, and thought it possible that it might never extend further, nor become more serious.

As a treatment, we recommended vigorous ablutions with the carbolic acid soap ; energetic frictions with some stimulant oil or liniment, such as the linimentum saponis with linimentum sinapis and chloroform, and internally the citrate of iron and quinine. He has the appearance of moderate health, but is somewhat emaciated and slightly anæmic : and the latter symptom was our indication for the citrate of iron and quinine ; while for a later period we recommended him our ferro-arsenical mixture, in a dose equivalent to four minims of liquor arsenicalis, three times in the day.

HERPES PROGENITALIS PERSTANS.—The term herpes progenitalis, the zoster genitalis of Von Barenprung, reminds us that herpes genitalis is not always præputial, but may sometimes occur on the glans penis as well as on the body of the organ, and also upon the labia pudendi of the female. Its quality of intermission is also well known, appearing every few weeks for a considerable length of time, frequently for several years. And equally recognised is its dependence upon aneurosis, or weakened nerve force of the part affected and of the organs in relation with it in function.

A case of this kind is now before us. A gentleman, 29 years of age, having undergone considerable mental anxiety, is debilitated and nervous. He has suffered from syphilis, and his urethra and genital organs are weak and irritable. Connection with his wife frequently induced irritable micturition, and occasionally herpes præputialis. He has had six attacks of this disorder during the last twelve months, and one, under which he is at present suffering, has continued for twelve days, and has not yet commenced to heal.

We do not remember to have met with any case of herpes progenitalis that was not preceded by syphilis or gonorrhœa ; the venereal affection having been the exciting cause of the irritation that displayed itself subsequently as an exhausted nerve-force. This was the case in the instance about to be

narrated, of which the remarkable feature is a persistent herpes. We are indebted to Dr. Hermann Weber, of Finsbury Square, for the opportunity of seeing the patient, whose history was briefly as follows :—He is a healthy young man of 23. Somewhat more than two years since he became affected with a venereal sore, which was treated with caustic and healed in three weeks. Two months later he experienced an attack of herpes progenerialis, and, with the exception of six weeks on one occasion, and two months on another, he has never been free from successive recurrences of the eruption for two years. At the present time he exhibits the remains of a patch, fourteen days old, on the right side of the body of the penis, and a fresh patch, two days old, on the left side ; and this comprises his history for the time already named. Believing the eruption to originate in exhausted nerve-force, partly of the general system, but chiefly of the part, we prescribed citrate of quinine and iron internally, and ablutions with cold water and carbolic acid soap locally ; merely applying to the inflamed patch a lotion of black wash.

MALPOSITION OF HAIR.—The development of hair in abnormal situations is an occurrence of a certain degree of frequency. At page 225 of the present volume of the CUTANEOUS JOURNAL we have adduced examples of the growth of hair from the wall of an ovarian cyst ; as also from the lining membrane of the mastoid cells and tympanum. Hair produced on the conjunctiva is also occasionally met with. But we have now to record an instance of abnormal situation of hair on the surface of the skin. The arrangement of the hair in the axilla is sufficiently well known ; it occupies both sides of the crease formed by the movement of the arm, the hollow of the axilla on the thoracic side, and the opposed aspect of the arm on the brachial side. The intention of the growth is obviously to prevent irritation from friction and immediate contact. But in a gentleman now before us the hair on the brachial side of the axilla is entirely absent, the part remaining quite bald, while a little lower down on the inner side of the arm, and altogether below the axilla, the missing hair is developed, and forms a patch equal in size to that which should have occupied the axilla. The hair is perfectly normal but misplaced, and the physiological intention of the growth completely frustrated. It is one example out of many, of those singular freaks of abnormality which have received the very apt designation of *lusus naturæ*.

IRREGULAR ZOSTER.—Herpes zoster is usually so constant in its habit, that its development is very properly regarded as obedient to a law ; and an aberration from that law, whenever it may occur, is sufficiently rare to excite our curiosity and attention, and to deserve a special record. The rarity of any variation from the type of unilateral development suggested to the ancients the idea expressed by Pliny—"Zoster appellatur, et enecat si cinxerit." Nevertheless, both Daniel Turner and Hebra have met with instances of the bilateral position of zoster, and consequently of the completion of the girdle which was supposed to destroy life, and without, it may be added, the occurrence of the latter event. Hutchinson has also noted the bilaterality of zoster ; but in his case, the half circle on the one side occupied the face, and on the other the thorax. The restriction of the eruption within the exact limits of the lateral half of the body is a phenomenon equally constant with its unilateral development. But we have now before us a gentleman

bearing the marks of a lumbo-intercostal zoster, of the left side, in whom a patch was produced to the right of the linea alba. The eruption in this case consisted of two large clusters, one near the vertebral column, and one near the linea alba, and the latter had extended its boundary so as to intrude for the space of two inches upon the opposite side. The cause of the aberration must necessarily have been an inosculation of the peripheral ends of the nerves of one side with those of the other, and as such an intercommunication is perfectly physiological, the aberration is one that may from time to time be expected and repeated.

Miscellaneous Memoranda.

THE SULPHITE ANTISEPTICS.—The special remedies for septic diseases have received further elucidation from Dr. Polli. A paper "On the Antiseptic Properties of the Sulphites" was read at the meeting of the British Association for 1867, in which Dr. Polli gave the results of his investigation of the action of the sulphite of lime, hyposulphite and sulphite of magnesia, and sulphite of soda. These substances possessed all the properties of sulphurous acid, with the advantage of a more uniform, certain, and constant action. Large doses may be administered without risk; while animals treated with those salts remained quite fresh, at a time when other animals not so treated, but killed at the same time, were in a state of putrefaction. Another series of experiments showed the administration of the sulphites to be a decided cure of diseases in which blood poisoning was present, as in fevers. The principle is not without its interest in the treatment of the phytodermic diseases, and is deserving of a fair trial in the instance of ringworm. The sulphite of soda in solution is one of our very best local remedies in the treatment of phytosis versicolor.

ANTIPYGENIC AND HEALING PROPERTIES OF SULPHUROUS ACID.—Dr. James Dewar, of Kirkcaldy, states that he has been long impressed with the idea that there existed an antagonism between sulphurous acid and pus. Putting his idea to the test of experiment, he found that a wound sponged with this acid, and afterwards dressed with it, healed rapidly, and in the most satisfactory manner, painlessly and puslessly. He finds his experience confirmed by Professor Syme, and he concludes by saying: "Sulphurous acid is superior in efficiency to carbolic acid, and is entirely free from the objections to the latter, its irritant quality and disagreeable smell."—*Medical Times and Gazette*, Sept. 21, 1867.

IODIDE OF POTASSIUM IN UTERO-DERMAL DISORDERS.—The melasmata and chloasmata owe their origin in many instances to disorders originating in the uterus. We therefore appreciate sensibly any suggestion that may help the skin by its influence over the instigating organ or function. Dr.

Mattei, of Paris, at the International Medical Congress, read a paper "On Uterine Disorders during Pregnancy," in which he endeavoured to prove that all the morbid sympathies of the pregnant state were referrible to uterine congestion and the subsequent pressure of the uterus on the neighbouring organs, and that iodide of potassium, by contracting these vessels (how ?) diminishes the congestion, and is therefore the only rational mode of treatment.

CANCEROUS AFFECTIONS.—One of the most recent of Parisian fashions is the use of azotite or ammoniuret of copper, recommended by M. Chappelle, in the treatment of cancer. The correspondent of the *British Medical Journal* observes: "This agent is said to have no action on the healthy tissues, whilst it rapidly disorganises cancerous surfaces. It has, besides, the advantage of calming the pains and diminishing the fœtor of the ulcers. It is employed in solution, and requires to be used for several months."

GAS CAUTERY.—A blowpipe has been lately invented which directs the flame of the common gas lamp upon a part to be cauterised. In careful hands this will doubtless prove an admirable instrument, and may supersede the slower operation of caustics. It was originally intended to be used for the destruction of small nævi, vascular and other growths, lupoid growths and ulcerations, phagedænic ulceration, and also for the arrest of hæmorrhage from small vessels. Mr. Hutchinson has employed it, with very satisfactory results, in a case of lupus of the body and limbs.

MUSCULAR SPASM OF THE SKIN.—Under the title of "A Remarkable Skin Affection," Dr. Heusinger, of Marburg, records an instance of extreme susceptibility of the skin, as shown by the development of wheals upon the slightest touch, and the production of raised figures, letters, and words, by tracing such figures with a blunt point. We meet with this peculiarity sometimes in persons suffering under urticaria, but Dr. Heusinger's case must be regarded as one of unusual manifestation. The patient was a peasant boy of 16, who was the subject of daily bleedings from the nose, and for this hæmorrhagic diathesis he was brought to the physician; the bleedings quickly ceased on his admission into the hospital, and during his residence there the peculiarity in question was tested. With the exception of the hæmorrhagic diathesis he was well in health, but apparently of delicate constitution. When lines were traced on the skin, the course of the lines, in the space of half a minute, reddened; and upon this reddened base there quickly rose up white ridges or wheals, so that in two or three minutes the lines of the writing stood up in strong relief, as exact in figure as if they were cut in marble by the most able sculptor. At the end of thirty or forty minutes the writing subsided and vanished completely without leaving behind a trace of its presence. When the red lines appeared they were accompanied with an elevation of temperature sensible to the young man himself, and amounting to $1\frac{1}{2}$ or $2\frac{1}{2}$ degrees of centigrade, and when pricked with a fine needle, the weals gave forth a minute drop of serum, as do the weals of urticaria; but however much or frequently the experiment was repeated, the body felt no inconvenience. In explanation of the phenomenon, it is obvious that the stimulus applied to the nerves of sensation was reflected upon the skin in the form of redness, heat, and swelling.—*Virchow's Archiv für*

Pathologische Anatomie und Physiologie und für Klinische Medicin, June, 1867.

NEW PARASITES OF THE HUMAN SKIN.—M. Judee lately observed at Collo, in the province of Constantine, in Algiers, an acarus of the family of Dermanis, on the skin of a lady affected with an eruption which she had contracted from an Arab family. Her body was covered with the animalcules, and some were found upon her clothing; they had the appearance of minute black points which moved quickly on the surface of the skin, and resembled in every way the acari found upon the skin in the scabies of the Kabyles. They were, however, unlike the acarus scabiei, and had no disposition to burrow in the cuticle, but were speedily destroyed by sulphur. Similar forms of acari are found among poultry, and may be conveyed to the horse, and from the latter to man. The other parasite, described by M. Rouyer, appears to have been the larva of an acarus, which swarmed on corn rendered unhealthy by the excessive wet of a rainy summer, and prevailed almost epidemically in the department d'Indre. It occurred chiefly on exposed parts of the body like the harvest bug, and, like the latter, gave rise to excessive itching, which fortunately lasted only a few hours; with the pruritus there was considerable redness, and the development of a crop of miliary vesicles, which latter subsided in four or five days. The animalcules had the appearance of minute black points, and the best mode of relief to the itching resulted from the use of a vinegar lotion.—*Journal de Medicine et de Chirurgie Pratiques*, July, 1867.

SOLAR RAYS ON THE SKIN.—Dr. G. Robinson, in a paper on certain effects of concentrated solar rays upon the tissues of living animals immersed in water, read at the meeting of the British Association of 1867, remarks that the nervous structures of animals are peculiarly sensitive to the stimulating agencies present in the solar rays, irrespective of the actual heat of the latter; hence burning pain, followed by inflammation and vesication, is produced on the back of the hand by the concentration of the solar rays, as completely as if the experiment were performed in the air. The subaqueous concentration of the rays on a part of the surface of an aquatic animal gave rise to pain; and when the focus could be retained for a few seconds on the head of a tadpole or small fish, death immediately resulted, as though from an electric shock. It is thus rendered probable that it was not the calorific element of the rays that produced the effects described; and whether or not their actinic or chemical influence, or some other active power allied to electricity or to the nervous force itself, is really contained in the sun's rays, must be left for future research. The question is an interesting and important one in its relations to cutaneous pathology.—*Medical Times and Gazette*, September 21, 1867.

VACCINATION DURING PREGNANCY.—A correspondent of the *Lancet* (Aug. 24) quotes the following passage on this subject from the pen of Dr. Meigs, of Philadelphia:—"Pregnant women ought not to be vaccinated. This is a rule that I advise you to depart from only on the most urgent occasions. If a woman has been once vaccinated, and appeal to you to re-vaccinate her, because there is a present variolous epidemic, I hope you will refuse to accede to her request. Small-pox is exceedingly and peculiarly pernicious to

pregnant women. She who has it and miscarries, or who is brought to bed at term, generally dies. It is, in my opinion, inexcusable to expose her to so great a risk—a risk far greater than that from accidental contagion, or that of the epidemic.” This quotation is intended as a reply from Mr. Williams, of Truro, to a suggestion by Dr. Madge that pregnant women should be vaccinated during the prevalence of an epidemic of small-pox, as a protection to the child.

VACCINE LYMPH AND GLYCERINE.—The *Medical Times and Gazette* of September 21, 1867, directs attention to the possibility of mingling together vaccine lymph and glycerine without injury to the properties of the lymph. The mixed fluid has been kept for four months in a heated room without losing its contagious power, and in hermetically sealed capillary tubes might be preserved for a longer period. Dr. E. Müller, official vaccinator of Berlin, expresses his decided approval of the process, and is corroborated by Dr. Kipp, of Unna. The mixture is made by receiving the lymph on one glass, placing glycerine on the other, and then rubbing the two glasses together. The point of the lancet is dipped in the mixture and the operation performed in the usual way. Dr. Kipp prefers the plan of making eight parallel scratches on the arm, each half an inch long, and with one charge of the lancet; and he states that in seven-eighths of his cases he obtains a large oblong vesicle for every scratch. He believes this mode of proceeding less painful and more efficacious than vaccination by puncture.

COLOUR OF THE SKIN.—Mr. John Crawford read a paper at the British Association's meeting at Dundee, “On the Complexion, Hair, and Eyes as Tests of the Races of Men.” He observed that these conditions were a very doubtful test of race; but of the three, the colour of the skin was most characteristic. According to the report of the *Lancet*, the notion “that colour in men depended on climate, or that a powerful sun made the complexion more or less black, while a weaker one left it to improve in fairness in proportion to its feebleness, was a popular error, that had its origin in the narrow experience of our ancestors. He gave a number of facts that disposed of the hypothesis of climate; but as to the real cause of variety of colour, it was one of those inscrutable mysteries which they could not solve, any more than they could account for the varieties of colour in the lower animals.”

MELASMA PUERPERALE.—The *Medical Times and Gazette* (September 21, 1867) publishes a note from Dr. Whitehead, of Holloway, in which he says that being called to attend a woman, aged 42, in labour with her sixth child, he was “struck with a peculiar discolouration of her face, hands, arms, and legs, which were spotted like the skin of a leopard.” She had noticed the same appearance “during the last three months of her pregnancy with two preceding children.” At first she was alarmed, “but, after she had been delivered about a month or six weeks, the skin resumed its natural colour.” She has now been confined nearly a week, and her skin is beginning to assume a *pearly whiteness*. This latter remark points to a more grave alteration of the skin than simple melasma, and is probably allied with leukasmos. The leopard-like spotting is another sign of something more than a mere physiological accumulation of pigment.

EXCLUSION OF AIR AND LIGHT IN SMALL-POX.—As the fact is well known that the exclusion of air and light possesses an ectrotic influence over the

development and progress of small-pox, it redounds little to our credit that a convenient means has not yet been discovered by which this important result can be effected, promptly and easily, in practice. Sydenham taught that those parts of the skin which were chiefly exposed to the atmosphere suffered in greater proportion than covered parts. Sir Joseph Olliffe illustrated the value of the emplastrum de Vigo ; Hughes Bennett recommended a combination of lard and lamp-black for the purpose ; we ourselves have employed a diluted unguentum hydrargyri ; collodion, gutta percha, and other means have been adopted and suggested ; nevertheless, a convenient and perfectly innocuous agent is yet to be found. Mr. W. H. Brown, of Newburn, Blaydon-on-Tyne, in a communication to the *Lancet*, states that he has employed a warm coloured solution of gelatine with a very satisfactory result. He finds a yellow pigment, from its power of stopping the actinic principle of the light, equal in influence to the darker ones ; and commends this application for its elasticity and freedom from cracking. We should be glad to learn his mode of preparing the gelatine, and the pigment which he prefers ; and urge him by all means to the further experiments which he proposes and promises. He expresses his intention of trying next a combination of gelatine and carbolic acid.

INDIAN TREATMENT OF SMALL-POX.—The Mooroongs or Mroos, a race of hill-men, who live in the valley of the Matamoree, a large river to the south of Chittagong, practise the following curious custom whenever small-pox makes its appearance. The village is at once put in “khang,” that is, it is shut up, and no one is allowed to enter or leave. They then hang up a dead monkey at the entrance to the village, and the monkey’s blood is sprinkled, with invocations, on every house. The village is swept by the women, who use monkey’s tails as brushes, and the disease is thus forced to the gate, when they dismiss it with curses, and cut down the dead monkey. If, however, after and in spite of these solemn proceedings, any one in the village should be taken ill with small-pox, the whole population abandon houses and crops and flee into the jungle, for they say this must be a very strong demon, and it would be useless to contend with him.—*Dr. Wise in the Indian Medical Gazette for 1866.*

VACCINATION IN PARLIAMENT.—Of all discoveries that have illustrated the career of humanity, there is none, according to our estimate, which, for brilliant success and solid utility, can compete with the marvellous discovery of Dr. Jenner. A generation brought up under the state of things which this great benefactor of mankind has created can form no adequate conception of the miseries from which vaccination has delivered the human race. In addition to all the other woes that flesh is heir to, every person had the prospect of suffering at some period of his life one of the most malignant and loathsome disorders with which human nature can be afflicted. Nor was this a remote contingency. People lived under the daily expectation of its occurrence. No one was secure from day to day, and if we would justly estimate the amount of the risk we have only to think of the remedy that was submitted to in order to avoid it. In order to escape having small-pox in the natural way, people were willing to submit to inoculation—that is, to inflict upon themselves the disorder—

which occasionally proved fatal, which was always attended with much suffering, and which was just as contagious as the natural disease. And yet, instead of acknowledging with thankfulness the impunity which all who please enjoy from this scourge, there are a number of persons in this country who have set themselves deliberately to undo this great work, and bring us back to the situation from which the discovery of Jenner rescued us. These persons are indefatigable in circulating every statement which can induce parents to withhold vaccination from their children. They are, intellectually, the lineal descendants of those who, in the earlier days of the discovery, circulated pamphlets and caricatures which represented that the nation, unconsciously, was dying of vaccination. A child at Peckham was said to have had its form and natural disposition changed to the brutal, so that it ran upon all fours like a beast, bellowing like a cow, and butting with its head like a bull. Sarah Burley's face was distorted, and began to resemble that of an ox. Master Joules, similarly degenerating, became the ox-faced boy, a proverb and a frontispiece. A lady's daughter coughed like a cow, and had grown hairy all over her body. Some also squinted as only oxen can squint. Dr. Jenner, distinguished from ordinary practitioners by the addition of cowtail and horns, was caricatured as discharging large hampers of children into the mouth of the monster Cowpox.

The question of the utility of vaccination has been solemnly submitted to 541 medical practitioners, and all except two have reported in its favour. A doubt has been raised, owing to some unfortunate occurrences on the Continent, as to whether other diseases besides cowpox may not be communicated by vaccination. The answers are almost uniformly in the negative ; and yet it is asserted that every species of disease and contamination of the blood is perpetually repeated. Great exception is taken because the question was confined to vaccination, as if any one could doubt that many diseases might be communicated by inoculation with other matter than that of the vaccine disease. But Mr. Henley is worth quoting, above all men, as a specimen of the degree in which inveterate prejudice can perplex a naturally clear head and harden a kindly nature. He is very full of compassion, only somehow he contrives to feel it in the wrong place. Here is a specimen of the sort of argument which satisfies on this subject the mind of one of the most acute reasoners in the House of Commons. "If," said Mr. Henley, "you do to others as you would be done by, how would you like to be compelled to take your children a certain distance to be mixed up with other children, all waiting to have an operation performed on them, and such an operation ? The medical authorities insist that four punctures at least ought to be made on the unfortunate children. Not only ought these four wounds to be inflicted on them, but they are to be brought in all weathers, and under all circumstances, and compelled to have every one of the wounds opened, in order that matter may be extracted, so that the sufferings of the children and the cares of the mothers would be thereby prolonged." It really would seem as if Mr. Henley had worked himself up to believe that this measure, which is one of the purest and truest humanity, was an act of odious cruelty ; that the slight and almost unfelt puncture in a child's arm was a severe operation ; and that the absolutely painless opening of the vesicle on the eighth day was a cruel and useless

torture, in no degree justified by the consideration that this is the only way in which the lymph required for other operations can be supplied.—*The Times*, June 19, 1867.

HYPERÆSTHESIA AND HEAT CONSEQUENT ON ARREST OF CIRCULATION.—At a meeting of the Pathological Society of Philadelphia, in January, 1867, Dr. John Ashhurst, junior, said :—"I desire to call the attention of the Society to two symptoms which I have observed in several cases of deligation of the main artery of a limb, and which have been observed by others in cases of sudden arterial obstruction from disease. I refer to *hyperæsthesia* of the part below the seat of obstruction, and *increased temperature* in the same locality. It is generally stated by surgical writers that the first effect of the ligation of a large artery, such as the femoral, is a *diminution* of the temperature of the parts below, followed after some hours by an increase of heat, and still later again by a secondary diminution. I have, however, in two cases observed an immediate *increase* of temperature so rapid as to preclude the idea of its being caused by the afflux of blood to the surface in the establishment of the collateral circulation, and only explicable to my mind by taking into consideration the agency of the nervous system, probably a reflex condition being induced somewhat similar to that which produces the increased temperature in injuries of the upper part of the spinal cord. My observations have not been made with the thermometer, and are, therefore, of course, incomplete. My object in bringing them forward at this time is merely to invite others who may have the opportunity to unite with me in their verification. The other symptom to which I have referred, *hyperæsthesia*, I do not find generally noticed by surgical writers. I have observed it in three cases in which I have tied the femoral artery for popliteal aneurism ; in the case where it was most marked, the excessive sensibility not entirely disappearing for a week or ten days. This symptom was also very prominent in a case of embolism of the common iliac artery, which Dr. Hutchinson reported to the Society in April, 1862. The sensory nerve fibres of the part below the seat of obstruction feel the loss of arterial blood (the local anæmia, as it were), and transmit an instant warning to the sensorium. Can we not here recognize a beautiful provision of nature, giving a caution to the patient to avoid pressure or rough handling of the limb, which, in the impaired state of the circulation, might easily produce excoriation and even sloughing? I once met with a case of general anæmia, in which the patient could not cross one leg over the other for a few minutes without the upper one 'going to sleep,' in the popular expression ; an extremely disagreeable symptom, which fortunately disappeared with the restoration of the general health."—*The American Journal of the Medical Sciences*.

NEURALGIC HERPES.—A correspondent of the *Lancet* (Aug. 24, 1867), a medical man, complains bitterly of the excruciating agony which he has suffered for the last six weeks. "For thirty years," he says, "I was subject from time to time to acute attacks of gout, but for the last five years the acute attacks have ceased, and I have been subject to atonic gout, accompanied with great debility, the parts principally affected being the knees. About six weeks ago I was seized with pains in the axilla and pectoral muscle, and on the third day after the pain began, herpes made its appearance under

the arm, the pain increasing in intensity and continuing up to this time, although the eruption has passed away. The pain, which is of a neuralgic character, recurs periodically, leaving me by day but continuing all night with but little cessation, depriving me of sleep, so that the morning finds me in an exhausted state. The symptoms of gout which formerly showed themselves have entirely disappeared at present, carried away apparently by the eruption." In a later communication the sufferer observes: "I am residing in a boggy, marshy country, and have invariably found, during a long practice, that neuralgia, like ague, in this locality, is of a periodic character." Having been recommended to paint the painful parts with a solution of iodine and collodion, and take the syrup of the iodide of iron internally, he continues: "This acted magically, so that I could get a little sleep at night. The pain at this moment in the axilla is like that of several bundles of needles running into the skin." For this latter he is taking citrate of iron and quinine, and painting the painful parts with soft extract of opium and belladonna.

RECURRENT NERVOUS PHENOMENA.—The repetition of cutaneous nervous phenomena are so frequent and well-known in pruriginous affections, and especially in certain forms of urticaria, that any fact bearing upon and illustrative of the same subject offers material of special interest to dermatologists. Of this kind is the following quotation from the *Lancet*, in reference to a boy lately in the Queen's Hospital, Birmingham, under the care of Dr. Foster:—"A healthy boy, thirteen years old, inhaled laughing gas, which produced the usual effects, but, strange to say, five days afterwards, the phenomena recurred and continued to do so for some months. During his stay in the hospital the fits came on almost daily and lasted from half an hour to two or three hours. They were characterised by sudden insensibility, laughing, singing, fighting, &c., and terminated in a deep sleep. The scenes enacted in each fit were the same, or nearly so; the same conversations and songs were repeated on each occasion. After a long and varied treatment he began to improve while taking bromide of potassium, and when last at the hospital, had passed a considerable time free from any attack. His family were all healthy."

LEPROSY.—In a paper read at the meeting of the British Association in Dundee, "On the Prevalence of Spedalske or Leprosy in the kingdom of Norway," Mr. Henry J. Ker Porter stated that he had visited the leper hospitals at Moldé and at Bergen, in 1866; that the disease was similar to that which he had seen among the lepers outside the walls of Jerusalem; that no fear of contagion existed among the officers and others brought into contact with the patients; and that in 1864 the number of cases present in Norway was 2,182, while in 1856 it was only 2,113.

ETIOLOGY OF LEPROSY.—"Tirhoot resembles many other parts of Bengal in the abundance of its marshy and low lands, the luxuriance of its vegetation, and the diffusion of its artificial springs or wells and stagnant waters; hence its inhabitants are more or less liable to the influence of malaria . . . Leprosy is a rare disease in this district, most of the cases I have met with having come from the north-west provinces."—*Dr. K. N. Macdonald in the Indian Medical Gazette for 1866.*

CUTANEOUS MANIFESTATIONS IN THE INSANE.—We published in our last number (page 219) an extract from a letter addressed to us by Dr. Begley, of the Middlesex Asylum at Hanwell, on the above subject. Dr. Begley's remarks are full of interest, and the conclusion which he draws from an experience of many years' standing, is that the insane are not more liable to affections of the skin than other persons. We were led to make the inquiry in especial reference to abnormal pigmentation of the skin, on account of the close relationship which is known to subsist between melasma and deranged function of the nervous system; and we concluded from Dr. Begley's observations that, whatever the state of the cerebral system, the organic nervous system underwent but little disturbance in the insane.

Our attention is again drawn to the subject by the perusal of a paper in the *Giornale Italiano delle Malattie della Pelle*, entitled *Le Pigmentazioni e l'Erpetismo nelle Alienazioni Mentali*, from the pen of Dr. Cæsar Lombroso, as observed in the clinical department of Professor Augustus Michelocchi. The conclusions drawn by the writer of the paper are: 1. That chloasmata and ephelidæ are common amongst the insane; 2. That they are more frequent upon the head, and especially the forehead, than any other part of the body, probably on account of paralysis of the vasomotor nerves of that region; 3. That they are frequently complicated by the presence of graver disorder of the skin, such as ekzema and pityriasis; and, 4. That certain cases may be distinguished as examples of herpetic mania, not only on account of their complication with cutaneous disease, but also on account of hereditary descent from herpetic parents, and the cure of the disease by remedies applicable to the treatment of cutaneous disorder, such as sulphur and arsenic.

In a total of ninety cases comprehending monomania, melancholia, mania, dementia acute, chronic, and epileptic, creeping paralysis, and idiocy, the author of the paper finds sixty-eight examples of maculæ cutaneæ, which he divides into *chloasmata*, bronze-coloured or yellowish-brown blotches as large as the palm of the hand and larger; and *ephelidæ*, smaller spots, of a *café au lait* colour, or of a chalky whiteness surrounded by a dusky areola. The chloasmata numbered 30; the ephelidæ, 19; while a mixed form was present in 19. The discolouration was more frequent in the male, namely, 30 in 37, than in the female, in whom the proportion was 38 to 53; and the instances were most numerous in the incurable patients, namely, 19 as against 11 in the males; and 30 as against 8 in the females. In reference to the forms of alienation, the abnormal pigmentation was found most commonly among the cases of mania, 21; next amongst those of monomania, 16; then in chronic dementia, 9; next, melancholia, 8; then, epileptic dementia, 7; creeping paralysis, 4; idiocy, 3; and acute mania, 2.

HUMAN HEALTH.—Some interesting and important observations on the acclimatization of races, the influence of atmospheric conditions, and the value of diet, were announced at the International Medical Congress in Paris in August, 1867. Dr. Simonat remarked that in the zone comprehended within the latitude of 30° north and south; wherever there was an absence of marshes, the races of Europe can establish themselves and propagate their stock by adhering to certain well-known hygienic rules, by guarding against the sudden vicissitudes of heat and cold, dry and damp weather; by prudence

in diet, avoiding alcoholic liquors, and *strengthening the functions of the skin by a regular course of cold bathing.*

Dr. Lombard, of Geneva, was of opinion that cold was the great cause of mortality in Europe; heat being generally favourable to the preservation of health. Children and elderly persons, however, frequently die from heat. Next to temperature, marsh malaria and poverty are the most prolific causes of disease.

Dr. Hingston, of Montreal, pointed out that differences of diet and acclimatization had produced great differences in the constitution of the English and French settlers in Canada; the former obtained food of inferior quality, were less vigorous and healthy than their neighbour, and subject to pulmonary affections. Whereas the French settler, longer rooted to the soil, eats two or three pounds of meat a day—generally pork—is healthier, taller, more powerful, and chiefly troubled with digestive disorders.—*Abstract from the Medical Times and Gazette*, September 21st, 1867.

THE CLOTHING OF MAN.—An old writer informs us that only fools and beggars suffer from cold; the latter because they cannot afford to buy clothing; the former because they are incapable of comprehending its use. If this be true, there be more fools in the world than wise men; for, in our experience, scarcely anything is more difficult than to adapt our clothing to the incessant variation of temperature of our climate and to the alternate conditions of exercise and repose. If we look at man alone, we should be led to infer that a slight clothing would be most suitable to his health; but if we stretch our view further into creation, and observe how Nature has provided for her children, and especially for birds, we are led to the conclusion that warmth is a primary necessity. This fact, is, perhaps, more strikingly illustrated among aquatic birds than amongst others; and the aquatic bird would seem to be the type of clothing from which the sea-going population draws its inspiration, as the following life-picture from the able pen of Mr. James Greenwood would indicate:—"I thought that I had, by means of a stout over-coat and a cap with ear lappets attached, made tolerably good provision against rough weather; but, as a glance convinced me, my rig was almost tropical in its scantiness compared with that which enveloped the captain and his crew of two. The way in which these fellows take care of themselves in the matter of clothing quite upsets one's pre-conceived notions of the 'hardy fisherman.' It may be necessary to their health—nay, the fact of so many hale and hearty men amongst them of three score years and ten sufficiently proves that they are not over careful; but truly no rheumatic old landswoman that ever lived pinned her faith to flannel more confidently than do these brawny ocean harvesters. Here was an autumn night—not a favourable night to be sure, but still the time of year was August; nevertheless Mr. Fludyer was encased as follows according to his own confession. Next his skin he wore a substantial shirt of grey flannel; over that a shirt of striped cotton; over that a woollen guernsey; over that a cloth jacket; over that a tanned smock that reached to his knees; over that an oilskin 'coverall' reaching high as his ears and low as his ankles. So much for his body comfort, but of his legs he was even more careful. First he wore socks of wool, then 'pants' of wool that descended just below the knee and were there

secured ; then a pair of blanket breeches ; then an enormous pair of woollen hose high as his thighs ; and over all these various wrappings a pair of sea boots that left nothing of the last-mentioned hose visible. On his head Mr. Fludyer wore a tarpaulin sou'-wester quilted within with some fleecy material, and on his hands knitted mittens. 'And do all fishermen on this coast wrap themselves up in the same manner?' I inquired. 'All except chaps that coddle themselves ; they wear a waistcoat as well, and sometimes a neck-wrap,' Mr. Fludyer replied ; 'but for my part I think that sweltering is bad for a man.'

A kindred topic is handled by Sir James Young Simpson, in his late address at the Social Science Congress at Belfast. The speaker is drawing the attention of his hearers to "the dreadful mortality amongst children. Having given statistics of this mortality, he attributed it to the ignorance on the part of mothers and nurses of hygienic laws. One great requisite for infant children was pure air, but it was essential that the air should be warm—cold was most destructive. What a shame, too, to put children into cold baths—little children that should be always warm. In a Highland regiment in which that practice prevailed amongst the wives of the men—hardening it was called—enough of the children did not live to make pipers for the regiment. The mother's milk, which God made, was better for the infant than any human composition. He then alluded to the mortality caused by the criminal starving by mothers of their illegitimate children. Having referred to some of the absurd prejudices which had been entertained against cow-pock, and to the antagonism which it still even encounters from some, he said that Jenner's discovery was the means of saving a number of lives equal to the whole population of the United Kingdom every twenty-five years. He received £30,000. Had he slain a hundred thousand men in battle he would probably have got much more, and been made a duke."

TREATMENT OF ANTHRAX BY SUB-CUTANEOUS INCISION.—M. Guerin, of St. Louis, practises the sub-cutaneous incision in the treatment of anthrax. According to the correspondent of the *British Medical Journal*, the operation "consists in plunging in the centre of the anthrax a straight bistoury, which is immediately insinuated on the flat under the skin, beyond the limits of the swollen part ; and as soon as the limit is passed, the cutting edge of the instrument is turned towards the deeper parts to incise them from the circumference to the centre till the sensation felt indicates that resistance is overcome. This first incision only indicating one radius of the diseased surface, three others are made which converge towards it to the point at which the bistoury was introduced. When the integuments offer a mortified point or an orifice, it can be used for introducing the instrument without its being necessary to divide the skin, to however slight an extent. The success of this operation, says M. Guerin, seems to solve the question of the seat of anthrax ; for, if it be practised at the outset of the malady, it arrests the march of it, and opposes the mortification of the skin. Often the cellular tissue suppurates, and is eliminated under the form of a core, while the skin presents no alteration. The sub-cutaneous incision of the anthrax has the special advantage of relieving the patients from the liability to erysipelas and to purulent infection. Besides, this means is not very painful,

for it spares the skin which is, of all the tissues, that of which the incision produces the most pain. Finally, it does not give rise to a deformed cicatrix, a consideration which is not to be disdained when the anthrax is seated on the face or any other uncovered part of the body. After the incision, emollient poultices are applied, and in all cases the cure occurs more quickly than by any other treatment." What would M. Guerin say to a dressing of carbolic acid according to Mr. Lister's plan?

PILOUS NÆVUS.—In the *Lancet* Mr. T. Smith mentions an example of this malformation which fell under the observation of Mr. Paget. "This child was admitted in St. Bartholomew's Hospital in 1865. She was at that time twelve years old. The left upper extremity and the greater part of the corresponding side of the trunk and neck were deeply stained with dark brown pigment, from which grew an abundant crop of brown, harsh, lank hair, varying in length from one to two inches. The skin was rough and harsh; the arm was long, thin, and withered; the scapula was unnaturally prominent. In fact, the upper limb, shoulder, and back bore a very strong resemblance to the corresponding part of a monkey. The mother stated that when three months pregnant with the child, she was much terrified by a monkey attached to a street organ, which jumped on her back as she was passing by." Mr. Smith informs us that "dermatologists have dignified these blemishes with various classical names;" but, if Mr. Smith will permit us to correct him, we would say that dermatologists have simply adopted the terms which they found in the writings of the fathers of medicine, the names by which these affections were known to those early ancestors from whom we are proud to have derived much of the learning of the present day.

PELLAGRA.—The cause of this disease is still a moot question, and has received little light from the discussion on the subject at the International Congress in Paris. Dr. Sorbets dwelt upon the doubtful ground of the dependence of the disease on the fungus of the maize, the *verdet*, or *verderame*, as first suggested by Balardini. Dr. Buchut believed that a parasitical fungus found on wheat might explain the existence of Pellagra where maize was never eaten. Whereas Professor Demaria, of Turin, vindicated the Italian view of the question which regarded poverty, malaria, and hereditary pre-disposition as among the essential factors of the cause.—*Abstract from the Medical Times and Gazette*, Sept. 21, 1867.

SARNA.—Sarna is the Portuguese term for "the itch," and the itch crops up in the world in a multitude of shapes; Sarna, as now referred to, in its existence amongst the alpacas of Peru, is evidently a pustular form of ekzema; and, as all remedies appear to have failed in curing it, we would suggest the trial of carbolic acid. We should have thought that, as the cinchona groves are so close at hand, an infusion as a drink and as a wash, and a compound of the powder and some innocuous grease, might have been found useful. The newspaper paragraph which has suggested these observations reports that the commerce of the port of Arequipa "was increasing, especially the wool trade, but it is found that the alpaca does not augment so much as sheep's wool, on account of the disease called "sarna," from which the alpacas suffer. It attacks them about the legs, body, &c., and is a species of pustule which commences with matter and afterwards is converted into small

worms. No certain cure is known for it, and the disease is very contagious, and carries off sometimes the half and even two-thirds of a flock. For this reason very few whites or mestizos keep alpacas, and the animal is, consequently, almost entirely in the hands of the Indians.

CALOTROPIS GIGANTEA OR MUDAR.—Mudar, under the name of *Asclepias gigantea* and *rumex gigantea*, has been extolled by Robinson and Playfair in the treatment of leprosy and syphilis, and by the latter author has been termed “vegetable mercury.” Mr. Durant praises it also very highly in the treatment of acute dysentery; it possesses, he says, all the virtues of *ipecacuanha* in the treatment of that complaint, and is absolutely specific. The dose is a scruple to a drachm of the powder of the root-bark. “Its most wonderful effect is its action in producing the flow of bile, and the other secretions of the alimentary lining membrane which before were all locked up; it does this generally in less than twenty-four hours after the first dose of twenty or thirty grains has been given and retained, being in this way and in every other respect a substitute for *ipecacuanha*,” which it also resembles in its tendency to produce nausea. The plant grows abundantly about all parts of India on sandy hedges and waste lands.—*Indian Medical Gazette*, 1866.

VEGETABLE CUTANEOUS IRRITANTS.—Several plants are known to irritate the skin, either by direct contact or through absorption into the blood. Of the former kind is the nettle, *urtica dioica* and *urtica urens*, the *mucuna* or *dolichos pruriens*, or common cowhage, and the *rhhus toxicodendron*, the trailing poison oak or sumach, a native of the United States of America; of the latter kind is the *atropa belladonna*. Pereira, speaking of the emanations of the *rhhus toxicodendron*, observes:—“When not exposed to the sun’s rays, as when it grows in shady places, and during the night, this plant evolves a hydrocarburetted gas, mixed with an acrid vapour, which acts most powerfully on certain individuals exposed to its influence, and produces violent itching, redness, and erysipelatous inflammation of the face and hands, or other parts which have been subjected to its operation; these effects are followed by vesications and desquamation of the cuticle. In some cases the swelling of the face has been so great as to have almost obliterated the features. But all persons are not equally susceptible of this poisonous operation; so that some peculiar condition of the cutaneous organ seems necessary for the effect to be produced.”

Dr. Henry Hartshorne, of Philadelphia, in a work entitled “*Essentials of the Principles and Practice of Medicine*,” published by Lea in 1867, speaks of the effects of the *rhhus toxicodendron* under the name of “poison-vine eruption”; and remarks that “in the treatment of this annoying but not dangerous attack I have had a good deal of experience in my own person, as well as with others.” He recommends as a remedy for the eruption, “lead water,” possibly liquor plumbi, “early, frequently, and freely applied, with a large camel’s hair pencil. It should not be put upon the open vesicles, which it irritates, but around them, upon the reddened skin. In the practice of my brother, Dr. E. Hartshorne, a very successful remedy has recently been the fluid extract of *serpentaria*, painted directly upon the eruption. It seems to kill it at once.”

PUSTULA MALIGNA.—This serious complaint, under the name of “Cumberland disease,” is said to prevail very extensively, at the present time, in Australia.

Correspondence.

ON THE NECESSITY FOR PROFESSORSHIPS OF DERMATOLOGY IN THE SCHOOLS OF MEDICINE.

To the Editor of the JOURNAL OF CUTANEOUS MEDICINE.

SIR,—In my student days, when attending the external department of various hospitals, patients suffering under different forms of cutaneous diseases frequently presented themselves, but, as a rule, the surgeons took no interest in explaining their nature to us, not even naming the disease, and it was only after being qualified that I was able to attend the clinical instruction given at a “special institution,” that I learned anything about the nature and treatment of skin diseases, and which occasioned me considerable pecuniary loss. Examiners at the different Licensing Boards expect the student to be familiar with this class of diseases ; but how can they, when they are not taught *dermatology* at the “recognized hospitals” which they are *compelled* to attend ? With regard to the principal London hospitals, this remark does not *now* apply, as within the last two years departments on skin diseases have been established at the majority.

The science of medicine is truly a noble study, as it is the study of the mental and corporeal condition of man, both in a state of health and also when debilitated by sickness. The members of the medical profession have intrusted to their care the lives of the people ; is it not then of the utmost importance, that we should obtain, by every means in our power, that knowledge which alone can furnish us with the means to cure disease and to alleviate pain ?

To accomplish this desirable object every opportunity to increase our knowledge must be embraced. The study and advancement of medical science should be our chief aim and occupation, letting the *odium medicorum*, so long proverbial, have no place amongst us.

In the JOURNAL OF CUTANEOUS MEDICINE, page 103, the following occurs : “Mr. Hutchinson, in answer to a question lately put to him—‘Wherein exists the utility of special hospitals ?’—replies, ‘They are useful as supplying the necessary amount of material for the study of every form and variety of a particular disease—they are useful as the means of training teachers ; and teachers of special subjects are the urgent want of the general hospitals.’” Are not the medical journals and press inundated at present with papers on cutaneous diseases ?

With regard to the advantages to be derived from *specialities* to the student in medicine the following extract from the introductory chapter to

Dr. McCall Anderson's work on "Parasitic Skin Diseases" may not be uninteresting :—"In France and Germany there is much more opportunity afforded to those desirous of devoting themselves to the study of a speciality, as is evinced in the formation of large special hospitals, and in the institution, by the different continental governments, of professorships in connection with these institutions. For, however much I may coincide in the opinion that the science and art of medicine, when split up into a great number of branches, do materially suffer, still I cannot help thinking that, by special attention to a few of the more important and least studied diseases, and by the formation of hospitals for promoting that purpose, the extent of our knowledge is enlarged, and the public are thereby so much the gainers."

Again, I quote the following from an editorial article called "Dermatology put to the Test," *Dublin Medical Press*, February 14th, 1866 :—"In the out-patients' department of the recognised hospitals cutaneous diseases have no definite position : they belong to any one—physician or surgeon ; as has been said by one high in the profession. The majority of students leave the hospitals without being able to recognise the most common diseases of the skin." From the above it is evident that it is not the fault of the student that he is not able to recognise the "most common forms of skin diseases," and at Paris, Montpellier, Strasburgh, Vienna, &c., chairs exist on cutaneous medicine, and special courses of lectures are delivered on the subject.

Formerly, a good deal of opposition was displayed against specialities, and the following remarks of Dr. McCall Anderson bear on this point :—"A great deal has of late been written against the special study of different branches of medicine, and against special hospitals and dispensaries. But who can glance, were it but for a moment, at the progress which has been exhibited during the last few years, without acknowledging that it is to the special study of particular complaints that this progress is to be attributed ? And is it not a curious fact that, while hundreds of practitioners call out loudly against specialities, the majority make exceptions in favour of one or two classes of diseases which, according to them, fail to be appropriately treated in general institutions ? This was very well illustrated a few months ago, when a meeting of the metropolitan counties branch of the British Medical Association was called for the purpose of considering the subject of special hospitals. The gentlemen named all condemned special institutions. Dr. A. P. Stewart, however, had no objection to the establishment of hospitals for consumption. Mr. H. Thompson agreed to the usefulness of hospitals for diseases of children and mental diseases. Dr. Seaton thought that hospitals for the treatment of epilepsy were necessary ; while Mr. Weller did not know that there was any great objection to hospitals for deformities, diseases of the skin, and eye diseases."

So that these gentlemen, while stating themselves adverse to the establishment of special institutions, made exceptions in favour of hospitals for consumption, diseases of the skin, diseases of children, mental diseases, deformities, eye diseases, and epilepsy. It is surely one of the best arguments which can be adduced in favour of special institutions, that a meeting called apparently for the purpose of condemning them, ends by unanimously approving of hospitals and dispensaries in favour of the above.

At the University of Glasgow, the senate encourages their students to embrace every opportunity of studying special diseases.

Lectures on ophthalmic surgery are now regularly given at the various medical schools, and students are consequently familiar with this class of diseases ; and I hope the time is not far distant when the science of dermatology will be taught as a necessary branch of medical education in all our provincial schools.

I remain, &c.,

A PHYSICIAN.

Books Received.

A PRACTICAL TREATISE UPON ECKZEMA ; including its lichenous and impetiginous forms. By Dr. McCall Anderson. London : Churchill. 1867. 8vo., pp. 180.

CONTRIBUTIONS TO DERMATOLOGY.—On the non-identity of the parasites met with in favus, tinea tonsurans, and pityriasis versicolor ; including proofs derived from the occurrence of these diseases amongst the lower animals, and their transmission from them to man. By Dr. McCall Anderson. Glasgow. 1866. Pp. 20.

RESEARCHES UPON SPURIOUS VACCINATION, or the Abnormal Phenomena accompanying and following Vaccination in the Confederate Army during the recent American Civil War, 1861–65. By Joseph Jones, M.D., Professor of Physiology and Pathology in the University of Nashville. Nashville. 1867. Pp. 164.

QUININE AS A PROPHYLACTIC AGAINST MALARIAL FEVER. By Joseph Jones, M.D. Nashville. 1867. Pp. 34.

THE WESTERN JOURNAL OF MEDICINE. Edited by Theophilus Parvin, M.D. Indianapolis. Nos. 7 and 8 for July and August, 1867.

GIORNALE ITALIANO delle Malattie Veneree e delle Pelle. Compilato e diretto dall Dott. G. B. Soresina. Milano. Fas. 7-11. 1867.

THE AMERICAN JOURNAL OF THE MEDICAL SCIENCES. Edited by Isaac Hays, M.D. Philadelphia : Henry C. Lea. No. 107, 108. 1867.

ON PAIN, and other Symptoms connected with the Disease called Hysteria. By Dennis De Berdt Hovell, F.R.C.S.E. London : Churchill. 1867. Pp. 44.

ON THE PATHOLOGY AND TREATMENT OF THE CONTAGIOUS FURUNCULOID. By Thomas Laycock, M.D., F.R.S.E. Edinburgh. 1856. Pp. 23.

LEPROSY. By C. Macnamara, Surgeon to the Calcutta Ophthalmic Hospital. Calcutta : George Wyman & Co. 1866. Pp. 59.

TUBERCULAR LEPROSY IN MADAGASCAR. By Dr. Andrew Davidson, Medical Missionary, Physician to the Court of Madagascar, &c. Edinburgh. 1864. Pp. 12.

UEBER DIE SOGENANNTHE PHTHIRIASIS (Läussucht). Von Professor Hebra. 1865. Pp. 24.

- EIN FALL EINES GEHEILTEN, AUS LUPUS entwickelten, faustgrossen Epitheliom's an der Wange. Von Professor Hebra. 1867. Pp. 14.
- CONFERENCES CLINIQUES sur les Affections de la Peau. Par le Docteur Lailler, Médecin à l'Hôpital Saint Louis. Paris. 1867. Pp. 12.
- REPORT OF THE COMMITTEE FOR THE PREVENTION OF VENEREAL DISEASES ; adopted by the Harveian Medical Society of London. Edited by Charles R. Drysdale, M.D., and J. Brendon Curgenvén. London. 1867. Pp. 14.
- SECOND ANNUAL REPORT OF THE DISPENSARY FOR DISEASES OF THE SKIN, BELFAST. By Henry Samuel Purdon, M.D. 1867.
- GERMINAL MATTER AND THE CONTACT THEORY : an Essay on the Morbid Poisons ; their nature, sources, effects, migrations, and the means of limiting their noxious agency. By James Morris, M.D., Lond. Second edition. Churchill. 1867. Pp. 111.
- THE MEDICAL AND SURGICAL REPORTER : a Weekly Journal. Edited by S. W. Butler, M.D. ; and D. G. Brinton, M.D. Philadelphia. October, 1867.
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Contributors are requested to send in their Papers as early in the Quarter as possible ; all communications to be addressed to the Editor, 17, Henrietta Street, Cavendish Square.

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